

Paul Ingevaldson offers an IT cheat sheet for your CEO. PAGE 58

Dell gave up on Itanium. Now backers of the chip are launching an effort to broaden its use. PAGE 6

### Lessons Learned, **IT Managers** Steel for Rita

Users rush to implement disaster recovery plans, find off-site hosts ahead of latest storm

### BY LUCAS MEARIAN AND TODD R. WEISS

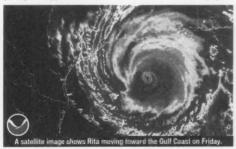
As Hurricane Rita bore down on Texas and Louisiana late last week, Houston-area IT managers scrambled to get disaster recovery plans in place - some keeping in mind lessons that they learned when Hurricane Katrina hit the Gulf Coast late last month.

Rita was projected to make landfall over the weekend, posing the biggest threat to

areas that weren't affected when Katrina plowed into coastal communities in Mississippi, Alabama and eastern Louisiana on Aug. 29.

David Langston, CIO at Houston-based Allied Home Mortgage Capital Corp., last week said his company was busy arranging for temporary executive office space in Dallas and moving key employees there to continue operations

Rita, page 66



laladladaralllluudkaralladladaldladaall #0234945/CB/7# CW200539 6338

UMI PERIODICALS PO BOX 1346. ANN ARBOR MI 48106-1346

62-3

As Oracle Corp. continues moving away from its traditional strategy of growing its applications business through internal development and instead expands through large acquisitions, the company's in-

Eye on Fusion, Support

stalled base is watching warily. At Oracle's OpenWorld conference here last week, users said that the company has so far said the right things to try

Vendor attempts to

reassure customers

about product plans

BY MARC L. SONGINI

to reassure them of its intentions. At the same time, though, several also said they're closely following the evolution of Oracle's Project Fusion product road map and new changes in its support programs.

Oracle, page 68



port policies in an effort In reta

ing user base

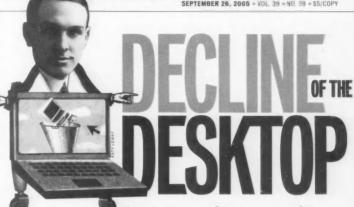
### Oracle Users Keep Close Metrics Fall Short of Mark **On Security**

BY JAIKUMAR VIJAYAN

Metrics that measure only the performance of security personnel and the tools they use are of limited value when it comes to assessing the true effectiveness of data protection investments, said IT managers at a conference here last week.

Attendees at the conference, which was held by the Information Systems Audit and Control Association, said that a better approach is to combine information security metrics with other perfor-

Metrics, page 16



Laptops are taking over as the personal computing machine of corporate America. reports Robert L. Mitchell. Why? Workers want mobility - not just on the road, but within their buildings via wireless networks. PAGE 29





"From a manager's view, the fact that we increased stability, improved operations, and reduced costs while adding so many users is very, very good."

**Yuen Ho**Director of Corporate Systems and Architecture, *eBay* 

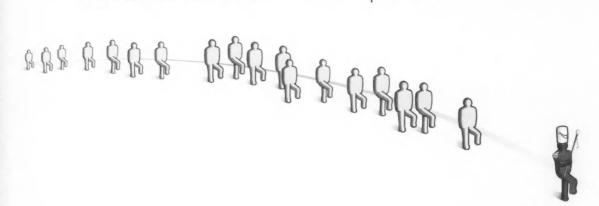
Make a name for yourself with Windows Server System.

Upgrading to Microsoft\* Windows Server System makes it possible for eBay, the leading online marketplace, to consolidate its mail servers from 85 down to 25, while handling over seven million e-mails a day. Here's how: By deploying Windows Server 2003 with Exchange Server 2003, eBay kept its growing global workforce connected while reducing the number of mail servers and sites to support, thereby cutting basic costs per mailbox by 70 percent. To get the full eBay story or find a Microsoft Certified Partner, go to microsoft.com/wssystem



| Server Operating System      | Windows Server™                        |
|------------------------------|--|
| IT Operations Infrastructure | Systems Management Server              |
|                              | Operations Manager                     |
| Security Infrastructure      | Internet Security & Acceleration Serve |
| Applications Infrastructure  | SQL Server™                            |
|                              | BizTalk* Server                        |
| Collaboration Infrastructure | Exchange Server                        |
|                              | Office SharePoint Server               |

Sterling Commerce leads the world in helping businesses collaborate with their partners.



Of course, we've had a 30 year head start.

For over 30 years, Sterling Commerce has led the industry in helping successful organizations work more effectively with suppliers, subsidiaries and customers. Now, with the first platform to meet all the challenges of real-world multi-enterprise collaboration, Sterling Commerce can help you achieve end-to-end visibility, and real-time control over shared business processes. So you can make faster, better-informed decisions to help cut costs and accelerate time to market. Perhaps that's why a majority of the world's leading companies already depend on us. And competitors can't quite keep up. Contact us today. Or visit us at **www.sterlingcommerce.com** 

BUSINESS APPLICATIONS / BUSINESS INTEGRATION / BUSINESS INTELLIGENCE / BUSINESS PROCESS MANAGEMENT / SOLUTION DELIVERY



# CONTENTS

Supercomputer on a Chip

In the Technology section: A new microprocessor architecture is aimed at overcoming barriers raised by overhead and overheating and may eventually yield a trillion operations per second. Page 40



09.26.05

### **Public-Sector Blues**

In the Management section: Do public-sector IT projects go bad more often than private-sector initiatives, or is it just that we all get to watch? Either way, certain common problems have gradually become apparent. Page 49

### NEWS

- 6 Itanium backers push for more software vendors to port their apps to the 64-bit chip in the wake of Dell's decision to stop using the chip.
- 7 Microsoft upsets some users with its plan to make Windows Vista Enterprise available exclusively to its Software Assurance customers.
- 7 A corporate reorganization of Microsoft is aimed at making the software vendor more agile.
- 10 The Pentagon is developing a Web-based version of its massive procurement system.
- 10 VolP and converged network projects put stress on IT.
- 12 Business Objects courts nontechies with its latest BI tools.
- 12 Four BI vendors mix HP's OpenView Business Process Insight tool into their systems.
- 14 Global Dispatches: Siemens says it will cut 2,400 jobs from its Munich-based IT services unit by 2007.
- 14 Hewlett-Packard adds switches and software for managing network edges.
- 16 A mortgage broker plans to deploy a hosted CRM system for 5,000 end users.
- 20 **Firefox** is found to have more flaws than IE, but numbers may not tell the whole story.
- 22 HP plans to buy troubled Peregrine for \$425 million.

### **TECHNOLOGY**

- 29 Decline of the Desktop. As laptops' prices fall and their performance increases, corporate users are adopting them in increasing numbers. Soon they will outnumber desktops in the enterprise.
- 37 Geek's Garden. High-performance computing takes on high gas prices. Also, learn about the birth of magnetic recording technologies.
- 42 Security Manager's Journal:
  Compliance Focus Leads to
  Experiment in Cheap Film.
  C.J. Kelly's agency needs its
  employees to comply with
  HIPAA's privacy and security
  rules, so she realizes the training has to be interesting.

### MANAGEMENT

than technology.

- 52 How To: Meeting of Minds.

  The ability to run a good virtual meeting is an increasingly important skill in the global marketplace. But it takes more
- 56 Managers' Forum. Paul Glen discusses the right and wrong reasons for switching to the management track, as well as how to approach one particularly delicate management challenge.
- 57 Career Watch. A talk with Nizam Ishmael, a 30-year-old IBM university ambassador and master inventor. Plus, a call for more intensive training for outsourced workers; and the current IT employers of choice among undergrads.

### **OPINIONS**

- 8 On the Mark: Mark Hall reports that the Global Grid Forum hopes a new layer of grid computing standards that will sit on top of existing Web services standards will usher in the next phase of distributed computing.
- 24 Don Tennant acknowledges there are differences between public- and private-sector IT operations, but he thinks that fact should bring IT professionals in the two sectors together, not keep them apart.
- 24 Thornton A. May looks at the changes coming to IT work, workers and work processes.
- 25 Virginia Robbins will continue to favor hiring for skills over degrees until IT adopts universal standards.
- 46 Robert L. Mitchell says that where desktop applications reside and where they run are becoming irrelevant when it comes to virtualization.
- 58 Paul M. Ingevaldson has an IT cheat sheet for new CEOs.
- 70 Frankly Speaking: Frank Hayes saw lots of good, great and bad ideas at DEMOfall. But does he really know which is which?

### 

| News Briefs         | Z |
|---------------------|---|
| Letters2            | 5 |
| IT Careers 6        | 0 |
| Company Index 6     | 4 |
| How to Contact CW 6 | 4 |
| Charle Toule 7      | n |

### ONLINE

WWW.COMPUTERWORLD.COM

### Are IT Priorities In the Wrong Place?

IT MANAGEMENT: Alinean's Tom Pisello finds key differences in the spending priorities of top-performing companies and laggards.

O Quickl ink 56849

### Haste Makes Waste

DEVELOPMENT: A study on software metrics yields some surprising results about what happens when more coders are added to complete a project faster. 

QuickLink 57019

### The Best of DEMOfall

HARDWARE: Computerworld's Frank Hayes went to last week's conference and blogged throughout the week about the presentations of most interest to corporate IT. See what he found out. • QuickLink a7160

### **Considering a Consulting Career**

CAREERS: An IT consulting career has its benefits. But is it right for you? Robert Half Technology's Katherine Spencer Lee explores some of the issues you should consider before choosing that path.

QuickLink 56925

### The Business Value of RFID

WEBCAST: Kids Headquarters serves major U.S. clothing retailers. In recent years, the company has embraced RFID at practically every stage of its supply chain. CTO Kevin Downs described these issues in his presentation at the 2005 Mobile & Wireless World conference. • QuickLink a710

### What's a QuickLink?

Throughout each issue of Computerword, you'll see five-digit QuickLink codes pointing to related content on our Web site. Also, at the end of each story, a QuickLink to that story online facilitates sharing it with colleagues, dust enter any of those codes into the Quick-Link box, which is at the top of every page on our site. ONLINE DEPARTMENTS Breaking News

QuickLink a1510
Newsletter

QuickLink a1430
Knowledge Centers

QuickLink a2570

The Online Store

QuickLink a2420

### **Sun Backs Rejection** Of Exec Pay Plan

Sun Microsystems Inc. is expected to ask shareholders at its annual meeting this week to reject proposals calling on the company to change its executive compensation policies. In its proposal, Service Employees International Union CLC suggests that stockoption grants for top executives be "performance-based" to more closely link compensation to Sun's financial health.

### **Oracle Reports Q1** Sales, Profit Gains

Oracle Corp. reported strong firstquarter results, which executives said were driven by software sales and the successful integration of PeopleSoft Inc.

| ORACLE BY THE NUMBERS |        |        |  |  |
|-----------------------|--------|--------|--|--|
| REVE                  | NUE    | PROFIT |  |  |
| Q1'06                 | \$2.8B | \$519M |  |  |
| Q1'05                 | \$2.28 | \$509M |  |  |

### **Symantec Buys Security Tool Maker**

Symantec Corp. has agreed to buy WholeSecurity Inc., an Austinbased developer of so-called behavior-based security software designed to protect computers from unidentified virus threats not typically detected by signaturebased products. Symantec plans to combine WholeSecurity's Confidence Online product suite with its own consumer and enterprise security products.

### NSF, School to Open **Research Center**

lowa State University and the National Science Foundation plan to open a research center to study cybersecurity issues like wireless security. The new Center for Information Protection will be funded mostly through membership fees paid by cybersecurity vendors and users and aims to create technologies to help members fight common cybersecurity problems.

### AT DEADLINE Vendors Look to Boost Itanium After Dell Abandons Processor

HP. Intel. others seek more app support for chip

BY PATRICK THIRDDEAU

ODAY, two weeks after Dell Inc. said it would stop selling Itanium-based servers, the hardware and software vendors that continue to back the Intel Corp. processor plan to announce the formation of an industry group that will work to broaden its adoption.

The Portland, Ore,-based Itanium Solutions Alliance (ISA) includes systems vendors such as Hewlett-Packard Co, and Unisys Corp., as well as Intel and software vendors such as Microsoft Corp., Oracle Corp. and SAP AG.

The ISA wants to expand use of Itanium by helping other vendors port their applications to the chip's EPIC architecture. Beginning in November, the industry group will hold events to help developers build ports and test their software.

"The alliance hopes to accelerate both the application porting . . . and then the momentum for those Itanium platforms and solutions," said Chas Weber, who heads enterprise server market development at Unisys. More than 5,000 applications are supported on Itanium now, according to ISA officials, who wouldn't say by how much they hope to increase that number.

Additional software support is needed, said Carol Murphree, computing consulting services manager at the Cornell Institute for Social and Economic Research at Cornell University in Ithaca, N.Y. Murphree said the research center has about 500 users working with a variety of statistical and mathematical applica-

### Itanium Outlook

IDC predicts that by the end of next year:

- Shipments of Itanium-based systems will increase by 68,000 units, although some of those systems will be replacements for existing machines.
- Total revenue from Itanium hardware sales will increase from \$2.5 billion to \$3.6 billion.

tions, many of which haven't been ported to Itanium.

"We're disappointed that the Itaniums haven't taken off the way we've hoped, because we really like working with them," she said.

### **Slow Sales**

Itanium certainly wasn't a big seller for Dell, which had been offering a single system based on the chip for use in applications requiring high floatingpoint performance. Research firm IDC has counted only about 3,000 shipments by Dell since it began tracking sales of Itanium-based servers in 2001.

In total, approximately 75 000 servers with Itanium processors had been shipped worldwide as of the end of Iune, said IDC analyst Stephen Josselyn. HP, which helped Intel develop Itanium, has accounted for about 50,000 of those systems, Josselyn added.

But even if Dell's decision will have little impact on the market, it leaves users such as Rob Whitehouse, head of IT infrastructure at Londonbased online travel agency Iglu.com Ltd., in a lurch.

Whitehouse may put on hold planned upgrades of his two Itanium-based Dell servers from two to four processors. "This whole decision puts a lot of doubt" on

the upgrades, he said.

Whitehouse has been pleased with the servers but said Dell's exit from the market may prompt him to investigate systems based on Advanced Micro Devices Inc.'s Opteron chip as well as Intel's Xeon processor with 64-bit extensions. Both of those devices can run 32-bit as well as 64-bit applications.

**Bucks County Community** College in Newtown, Pa., runs its core financial and student information systems on six single-processor Itanium servers from HP.

Doug Burak, the school's server network security manager, said he's "very happy" with the Itanium hardware. "Performance-wise, it's hard to beat," Burak said, But he added that he's "a little concerned" about the competition Itanium is getting from Opteron and Xeon. O 57048

### Sun Speeds Up UltraSparc, Adds New Servers

SUN MICROSYSTEMS INC.

last week released its UltraSparc IV+ processor, the first upgrade to its chip line in 18 months. The company also unveiled five servers that are based on the new processor, ranging from a four-way system to one that can support up to 24 processors.

Users who upgrade their existing hardware will see performance that's nearly twice that of the original UltraSparc IV and up to five times faster than the UltraSparc III, according to Sun. In many cases, customers will be able to make the change with just in card swap.

The new chip is the first built by Sun using 90-nanometer process technology, which enables it to put more transistors in a smaller space to improve performance and reduce power needs. In comparison, the Ultra-Sparc IV uses 130nm technology.

"This is a new chip, not a speed bump," said Bob McGaughey, vice president of product development for the UltraSparc line.

McGaughey said Sun also improved the performance of the dual-core device by integrating a 2MB memory cache on the chip itself and a 32MB cache on its motherboard.

Despite the promised performance improvements, the new processor "doesn't fundamentally change UltraSparc and Sun's positioning in any way," said Gordon Haff, an analyst at Illuminata Inc. in Nashua, N.H. "It's the type of incremental upgrade that computer makers sort of have to deliver "

The Landrum Co., a bank holding company in Columbia, Mo., uses systems based on UltraSparc III chips to run packaged banking applications, Jim Stock, Landrum's CIO, said that he's happy with the performance he gets and that any upgrade to UltraSparc IV+ would require certification and testing by his application vendor. Until the software is certified for the new processor, "there's really no reason for us to look at it. Stock noted.

The chip's current clock speed is 1.5 GHz, below the 1.8-GHz level that Sun initially promised. But Nathan Brookwood, an analyst at Insight 64 in Saratoga, Calif., doesn't view the clock-speed issue as a big deal. "It's manufacturing economics," he said, adding that chip vendors typically start with clock speeds that they feel comfortable with from a production standpoint and that will be enough to satisfy customers.

- Patrick Thibodeau, with China Martens of the IDG News Service Microsoft will limit upcoming client OS to customers with Software Assurance

### BY CAROL SLIWA

Microsoft Corp.'s decision to make an enterprise edition of Windows Vista available only to companies that have signed on to its Software Assurance upgrade protection and maintenance program is rankling some IT managers.

The software vendor disclosed the exclusive availability plan for its Windows Vista Enterprise client as part of a series of enhancements to the controversial Software Assurance (SA) program, which it introduced four years ago. The added features also include deployment planning services for desktop PC rollouts and round-the-clock problem resolution support (see chart).

Dennis Callahan, CIO at The Guardian Life Insurance Company of America in New York, said he expects to use many of the new extras as part of his company's Enterprise Agreement, which has SA built in. "But if I didn't have a deal," he added, "I would be livid at not getting full volume encryption, given Microsoft's track record on security."

Full volume encryption is a hardware-based data-protection technology that's one of the key new features pegged for inclusion in Windows Vista Enterprise. The technology is aimed at helping companies that lose laptop PCs prevent unauthorized users from accessing their data.

Windows Vista Enterprise will also include a feature that lets IT administrators with global deployments localize a single disk image by including all languages supported by Windows. In addition, the Virtual PC Express technology will be bundled with Vista so users can run legacy applications in a virtual machine.

David Buzzell, CIO at The Sedona Group in Moline, Ill., said the staffing firm's first experience with SA turned out to be "totally worthless" after Microsoft didn't deliver a prod-

uct upgrade in a timely fashion. "It would have been more prudent for me to bypass SA and just purchase a new license when needed," he said.

Buzzell added that if his company decides it needs features in Windows Vista Enterprise, he would "hate to be blackmailed into having to make an either/or choice."

### **Makes Sense**

But Brian Siler, a lead programmer analyst at Beverly Hills, Calif.-based Hilton Hotels Corp., said it makes sense for Microsoft to offer extra benefits such as Windows Vista Enterprise to SA customers. Companies buy the contracts for "precisely this reason," Siler said.

To get SA benefits, a company must either purchase a three-year Enterprise Agreement or pay an annual fee of 29% of the license cost for desktop products and 25% for server products they have bought under the Select or Open licensing agreements.

Sunny Jensen Charlebois, a senior product manager in Microsoft's worldwide licensing and pricing group, said the company collected feedback from volume licensing customers and sought to map the latest batch of SA enhancements to the ways in which the customers use the program as part of the software life cycle.

The expanded problemresolution support offering could give some SA customers a chance to reduce their spending on support agreements with Microsoft by 50%, said Julie Giera, an analyst at Forrester Research Inc.

Giera doesn't see the requirement that users have SA to get Windows Vista Enterprise as a nefarious plot by Microsoft. "It would be a mistake to say this is a deliberate carrot they're hanging out there to force companies to buy Software Assurance," she said. "They're trying to reward companies that have stuck with them."

But Adrian Brown, CIO at Canal Insurance Co. in Greenville, S.C., compared the new SA benefits to a sequence in the book Cheaper by the Dozen, when the father first shows his children a rundown

### Software Assurance Program Upgrades

Additional training vouchers for customers with at least 30,000 Office or Windows client licenses.

24/7 support for all covered products, instead of support limited to business hours.

Desktop PC deployment planning services lasting one to 10 days, depending on the size of the user's SA investment.

Windows Fundamentals for Legacy PCs, a thinner OS that gives users running older versions the security features offered in Windows XP.

house in order to make the mediocre one to which they're moving look better than the one they're leaving. **© 57045** 

### With Reorg, Microsoft Aims To Make Itself More Nimble

BY CAROL SLIWA

Corporate IT shops could eventually see the effects of the internal reorganization that Microsoft Corp. announced last week in the form of a new Web-oriented, soft-ware-based service platform, according to analysts.

Microsoft disclosed plans to realign into three newly formed divisions (see chart). The one that holds the most importance for IT managers is the platform products and services division, which combines the software vendor's Windows client, server and tools operations with the Microsoft Network (MSN).

Kevin Johnson, Microsoft's former sales chief, and Jim Allchin, who had been group vice president of platforms, will serve as co-presidents of the expanded platform division until the end of next year. At that point, Allchin plans to retire, following the scheduled release of the Windows Vista client operating system.

In a memo to employees, Microsoft CEO Steve Ballmer said the goal of the reorganization is to make the company more agile for executing its "software-based services strategy." As part of the announcement, Ballmer noted that Microsoft's operations are being aligned "in a way that will enhance decision-making and speed of execution."

David Smith, an analyst at Gartner Inc., said the reorganization signals Microsoft's focus on a "software-as-a-service view of the world." Initially, such offerings likely will be consumer-focused, Smith said. "But as with almost all consumer technologies, eventually they [will] have an impact on what enterprises do," he added. "That doesn't mean that everyone will be running out using MSN for everything. But bits and pieces will be of increasing relevance and potential use for the enterprise."

Microsoft is gearing up to better position itself against Google Inc. and Yahoo Inc., which the company sees as its long-term competitors, said IDC analyst Al Gillen.

Ballmer said responsibility for driving the software-based services strategy across the three new divisions will fall to Microsofts New Look

The software vendor is realigning its operations into three divisions:

PLATFORM PRODUCTS AND SERVICES DIVISION

Combines the Windows client, server and tools units, plus MSN

CO-PRESIDENTS: Kevin Johnson and Jim Allchin (retiring at the end of 2006)

BUSINESS DIVISION SIGNATURE AND ADDRESS SITE OF THE STREET SITE OF T

= PRESIDENT Jeff Railes

ENTERTAINMENT AND DEVICES DIVISION

Combines the home and entertainment sives on and the mabble and embedded devices division

PRESIDENT Rubbin Buch

Ray Ozzie, who created Notes and founded Groove Networks Inc. before becoming one of Microsoft's chief technical officers in April, when the company bought Groove.

Rob Enderle, principal analyst at Enderle Group in San Jose, said many corporate users are frustrated by Microsoft's inability to respond effectively to all of their needs. The vendor had become "dysfunctional of late" as a result of its inability to foster internal cooperation, Enderle said. But, he added, the new streamlined business divisions should help Microsoft become more responsive to users.

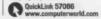
The changes should address

complexities in Microsoft's sales organization and product development groups, said Forrester Research Inc. analyst Ted Schadler.

Microsoft's previous structure consisted of seven business units organized around products. That approach "is fine if the products don't have the same customer," Schadler said. "When the products have the same customer, it creates problems." © 57051

### **READ MORE ONLINE**

Microsoft exec Martin Taylor says the reorganization should better integrate fluctures operations:



### BRIEFS

### **EU Reviews Gripes About Microsoft**

The European Union's antitrust authority has confirmed that it's analyzing "informal complaints" against Microsoft Corp. over its business practices. The complaints by industry rivals are separate from those that led the European Commission to impose a record fine on Microsoft and order it to unbundle Media Player from Windows and ensure that competing products interoperate with its workgroup server software.

### Avaya Buys Vendor Of Telephony Apps

Avaya Inc. has acquired Nimcat Networks Inc., an Ottawa-based maker of peer-to-peer communications software that's designed to be embedded in IP phones aimed at corporate users. The price was \$46 million (Canadian) in cash. Avaya said it will continue selling Nimcat's software and support the company's installed base.

### **User Groups Target Interex Members**

Independent Hewlett-Packard Co. user groups Encompass and OpenView Forum International are both offering members of the now-defunct Interex user group free one-year memberships. The aim is to offer Interex members "a try before you buy" approach to joining the organizations, said Kristi Browder, president of Encompass.

### Microsoft Buys Security Vendor

Microsoft has acquired Alacris Inc., a vendor of certificate management and identity assurance software in Ottawa. Terms of the deal weren't disclosed. Alacris' flagship idNexus Identity Assurance Management System is designed to help companies using security technologies such as smart cards deploy them in a user-friently way.

# **C** ON THE MARK

### HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

STREHLO says

IT execs aren'



# 'It's all distributed computing to me . . .

... says the chairman of the Global Grid Forum. Mark Linesch's refreshing observation cuts through the marketing babble of IT vendors that insist on confusing what he calls "the next stage of distributed computing" with terms like utility computing,

on-demand computing, the adaptive enterprise and, yes, grid computing. The Global Grid Forum is made up of more than 400 organizations that are



developing standards and promoting advanced distributed computing technologies. According to Linesch, most large companies are only in the early-adopter phase of grid-based systems, whereas many universities are deploying custom grids. He says that Web services standards, which grid technology depends on, need to be expanded before pervasive deployment of the systems can occur. Standards like XML and WS-Security go only so far in laying the foundation for true grids, Linesch says, adding that the GGF is working to create another laver of standards that would sit on top of the existing ones. For example, Linesch argues that IT administrators should only need to connect a device to a network. After the machines are plugged in, they ought to be able to provision themselves, describe the kinds of processing jobs they can perform and schedule jobs for execution. In Linesch's future world of distributed environments, IT's role will be less about managing hardware and software and more about developing and implementing policies for how grids should operate. When does he think the standards-based systems for this new era will start being snapped up by CIOs? "Well before 2010," he says.

But that won't happen if IT clings to . . .

... the belief that much of its value is keeping computers in line - by hand. Grid proponents like Linesch might consider the experiences of vendors such as Integrien Corp. when they make predictions about how quickly corporate

IT will let computers run unfettered on their networks. Kevin Strehlo, vice president of marketing at Integrien, claims that the compa-



Software as a service cuts piracy of code . . .

... by evildoers in China. Bob Nolan, president of Raxco Software

nate of the

ed software on

2003-2004

Inc., says that starting in 2003, whenever the automatic update feature in Raxco's PerfectDisk software

was invoked, the company noticed it "was getting slammed with a huge number of updates all coming from a couple of ISPs in China." Because Raxco doesn't sell or distribute its products in China, Nolan says he knew that it was pirates who were updating "millions and millions of dollars worth" of illegal software. Concurrently, the com-

pany was developing Perfect-Disk Live, an online service that became available in July for users of its disk defragmentation tool. An interesting side effect of the new service, says Nolan, is that it has mitigated piracy a bit. He thinks that's because a subscription-based online service gives Raxco better control of its licenses. Nolan contends that the movement toward software as a service might be one of the best weapons with which to fight all the pirates out there.

Give handheld users access to your ...
...network via an SSL VPN.

Early in Q4, Aventail Corp. plans to add secure mobile access features

to its Smart SSL VPN technology, which supports virtual private networks based on the Secure Sockets Layer protocol. Dubiously dubbed the



Aventail Secure Mobile Access Solution for PDAs and SmartPhones but mercifully shortened to Aventail Mobile for conversational purposes, the new software detects what kinds of devices are seeking access to a corporate network so it can send them data designed for their display capabilities. Aventail Mobile will come in two versions; one for only Web-based access will be bundled free with Smart SSL VPN, while one that adds client/server capabilities for devices running Windows Mobile will start at \$995. Chris Witeck, Aventail's director of product marketing, says network administrators can use Smart SSL VPN's manage ment console to set policies for handhelds, roaming laptops and home PCs. O 56981

### The best view in the city, the country, the world.

At one time, DHL had a data center in every country in which it operated. The result was a massive collection of small IT networks—without a mission control. With the help of HP Services and HP OpenView software, hundreds of data centers became three. By consolidating, DHL is now better able to share information, implement IT changes globally and "see" their entire network from a single point of cantral. Now, change never goes unnoticed, for more on HP's Consolidation Solutions, visit hp com/info/consolidation.

change

Solutions for the adaptive enterprise.



# STOP SEARCHING.

Laaking for a way to lower your compliance costs and increase the efficiency of your IT infrastructure while growing your business? Discover HP Compliance and Consolidation solutions. Visit the IDG-HP Enterprise Center featuring industry insights by IDC, and get your free executive brief today.

# START FINDING.

www.idgpartners.com/ec

Click to download free executive briefs, case studies and to find out how HP solutions can help you.



### Consolidation:

IT consolidation is gathering steam in the marketplace as companies of all types struggle with increasing infrastructure demands, smaller budgets, and changing business practices. This report identifies the current drivers for IT consolidation, describes the benefits and types of consolidation, and provides advice on selecting the right IT consolidation vendor.



### Compliance:

Government regulations such as HIPAA, Sarbanes-Oxley, and Gramm-Leach-Bliley have placed unprecedented pressure on companies to secure the authoring, updating, publishing, and archiving of their electronic documents and communications. This report examines the new regulatory demands and describes how companies can leverage compliance technology and processes for greater business advantage.







JUNE 14-16, 2006 SHERATON BOSTON HOTEL BOSTON, MA



### Great Change Means Greater Opportunity.

Are you Ready for your next Transformation?

### Find High-Impact Real-Life Solutions from Your Peers at the IDC IT Forum & Expo!

In only two and a half days you'll benefit from:

- Stories of successful IT-enabled business transformation from your peers who got it right.
- Seven tracks offering solutions to your complex IT challenges to help you establish or re-establish competitive advantage.
- Five Plenary Keynote Sessions led by globally recognized thought leaders and top IT executives, who'll offer a sweeping view of the IT landscape and the latest strategies for exceptional performance.
- 4. An invitation only CIO Summit that focuses on the imperatives CIOs must face to be successful, the key players in the challenge of ongoing business transformation.
- Four in-depth workshops that "deep-dive" into critical topics including Compliance,
   SOA, Open Source, Leadership & Negotiation.
- An expo floor featuring technology solutions in action. Get connected with vendors who want to help you overcome your IT challenges and expand their knowledge of your business.

CONFIRMED KEYNOTES:



JIM COLLINS
author of Good to Great and
Built to Last, fixtures on
the New York Times and
BusinessWeek Best Seller lists



Chief Research Officer, IDC

SPONSOR(S):



MEDIA & ASSOCIATION PARTNERS:

btn

COMPUTERWORLD

Health IT World

Technology

€ InfoWorld

KMworld

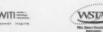
100

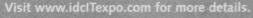
Manufacturing Ausiness Schoology

NETWORKWORLD'

NEW ENGLAND BUSINESS AND TECHNICAL INCH ASSOCIATION

Review THE WALL STREET JULI







For program questions and information on sponsorship opportunities, please contact Amy Catalogna at 508-935-4116 or acatalogna@idc.com.



# DOD Revamps Troubled Procurement Software

Web-based system will support about 40,000 users

BY HEATHER HAVENSTEIN

HE U.S. DEPARTMENT of Defense is gearing up to move its once-beleaguered procurement system from a client/server model to the Web, which will let it support some 40,000 users, nearly double the current total.

Officials from the Standard Procurement System (SPS) office, which oversees development and management of the Procurement Desktop-Defense 2 (PD<sup>2</sup>) system, last month began work on moving the system to the Web.

The current client/server PD<sup>2</sup> system is installed on 23,000 desktops at 800 DOD locations worldwide.

The move to the Web is a significant milestone for the SPS program, which halted development of PD<sup>5</sup> for a year beginning in 2002 after facing harsh criticism from the Government Accountability Office. A 2001 GAO report concluded that the DOD hadn't justified its PD<sup>2</sup> investment and was unable to validate whether it had any benefits for users since work was started in 1994.

Since then, the development operation has established an internal requirements board, radically overhauled its integration strategy by standardizing on XML to eliminate lengthy hand coding, built tools to automatically generate documentation and begun the Web project.

The new Web-based version, due to be rolled out in mid-2006, will expand the PD<sup>2</sup> system to include procurement of weapons systems, DOD officials said.

Ray Bjorklund, senior vice president and chief knowledge officer at Federal Sources Inc., a federal government IT research firm in McLean, Va., said the SPS program is progressing well after earlier missteps. He cited several reasons for the improvements, including the agency's decision to focus on including users in the process.

"They [now] have enough of an infrastructure in place to be able to handle major changes and do it in an orderly, systematic way," he said.

The SPS office began to work more closely with users on requirements and testing processes in 2002 and 2003 — after the suspension of the project. That effort helped considerably, since users earlier "didn't feel like they had a voice in the process," said Gino Magnifico, SPS deputy program manager.

Officials established a joint requirements board composed of middle managers, high-level executives and users, who submitted suggestions for features and product direction based on their needs. The middle managers looked across the department to make sure the requests would have broad applicability, and high-level executives mapped those needs to the strategic vision of the program.

"Now users feel like they have ownership of the process of developing the system," Magnifico said.

**Strategy Overhaul** 

The SPS office radically overhauled its integration strategy to ease the process of linking the PD's system to more than 30 financial management and logistical applications. Before the move to XML, PD' databases were routinely linked to legacy back-end systems using custom hand-coding methods, a time-consuming and costly process, Magnifico said. SPS staffers now use XMLbased adapters from Web-Methods Inc. for a common format to exchange data with the legacy systems.

They also use development tools from Evolutionary Technologies International Inc. (ETI) to automatically generate code that mediates between the XML format and the legacy systems.

"[Before,] we would do oneoff integration — what took priority was getting that integration up and running," Magnifico said.

In addition to the costly earlier coding process, "the documentation lagged badly behind the integrations," he said. To fix that, the SPS took advantage of the ETI tools' ability to automatically generate the documentation and associated 6,654 business rules for integration interfaces.

Because the ETI tools have captured all the metadata about the integration interfaces in the client/server version of the PD' system, mapping the system to the Web will take 50% less time than it took to develop the current version, said Amy Taylor, SPS technical division chief.

Q 57042



# Converged Network, VolP Projects Tax IT Managers

BY MATT HAMBLEN

As vice president of voice product development at Merrill Lynch & Co., Todd Goodyear has weathered six complicated years of converging voice and data communications on an IP network.

Goodyear said at last week's Fall 2005 Voice on the Net conference here that he and other network managers at Merrill Lynch are working on a seven-year plan that was designed to set a strategic direction for the convergence effort. But he noted that the plan has had to be adjusted to accommodate new technologies, unexpected problems and changing demands from end users and business managers.

"It's been a tough process," Goodyear said. He added that the standing joke among members of his staff is that they have been located on the first floor of an office building in New Jersey so they won't fall too far if they jump.

**Many Changes** 

Merrill Lynch has made some well-publicized changes in its technology plans as part of the project. In 2003, for example, the company chose a hybrid IP and circuit-switched system from Avaya Inc. to replace a Cisco Systems Inc. voice-over-IP system at some of its operations in New York and New Jersey.

Then, last year, Merrill Lynch once again turned to Cisco. In a deal that Cisco announced last February, Merrill Lynch opted to use the vendor's VoIP technology to support 14,000 financial advisers at 600 branch offices nationwide. The end result is a mix of pure VoIP and hybrid technologies, Goodyear said during a presentation at the conference. He noted that the company is dealing with three primary vendors: Avaya, Cisco and Nortel Networks Corp.

In addition, the vendors have been updating their software and hardware more often than expected — about two releases a year instead of one every 18 months. That means the team working on the project has had to react to changes faster than anticipated, said Goodyear.

Bruce Sennecke, a procurement specialist for voice and data technology at Allstate Insurance Co. in Northbrook, Ill., said he has experienced some of the same problems while helping to set up VoIP systems for the insurer over the past two years.

The biggest problem has been getting an accurate in-

ventory of how much equipment is needed across such a large organization, he said, noting that a majority of Allstate's 60,000 workers now have access to VoIP services.

Both Sennecke and Goodyear also cautioned that IT staffs need to be prepared for end users who want to keep their old phone sets. "The user resistance [can be] unbelievable," Sennecke said.

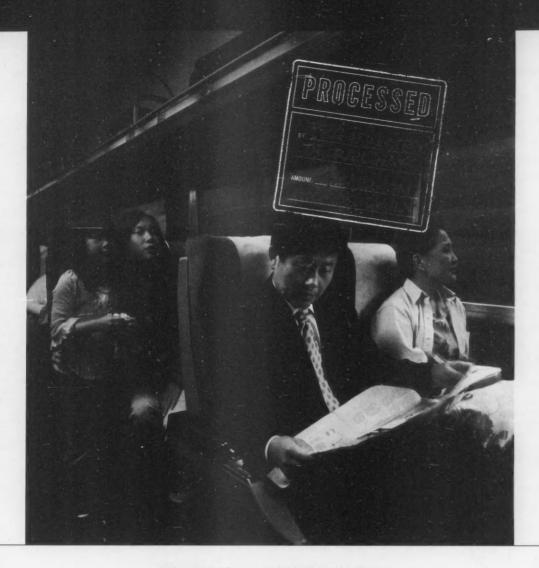
David Steen, CEO of Teleplus Consulting Inc. in Eden Prairie, Minn., said that despite the high level of interest in VoIP projects, IT managers need to carefully monitor costs and potential paybacks when starting a project.

"Sometimes the economics on VoIP don't work," he said. 0 57028

### MORE NEWS ONLINE

Hurricanes Katrina and Rita foster debate over the telecom industry's readiness:





With Sybase° software, the PRC Ministry of Railways developed an innovative ticket sales and reservation system that:

- Processes passenger traffic of more than one billion people a year
- Handles up to 5,000 ticket requests simultaneously
- Captures and analyzes passenger data on national, regional and local levels

Replacing an outdated, paper-based ticketing system that supports one of the largest railway networks in the world is a monumental task. That's why, when the People's Republic of China (PRC) Ministry of Railways wanted the right technology partner, they chose Sybase. Using Sybase Adaptive Server® Enterprise, Sybase® IQ, and Replication Server® software, the PRC created an information edge that enables passengers to purchase round-trip or one-way tickets from 24 regional ticket centers, 510 booking systems and over 5,000 counter terminals. That means customers are happier. Employee productivity is up. And trains are filled with people... and profits. www.sybase.com/infoedge116

Copyright CLEAS Sybase, Inc. All rights reserved. Sybase, this Sybase logo, Adaptive Summand Replication Server are trademarks of Sybase, In olicities registration in the United States of America. All product and company number are trademarks of their respective powers.

SYBASE"

### BRIEFS

### Sony to Cut 10,000, **Expects Losses**

Sony Corp. said it will cut 10.000 jobs and a number of product models in the coming years as part of an effort to cut costs by \$1.8 billion by March 31. 2007. the end of its 2007 fiscal year. When it announced the moves. Sony said it expects to lose \$90 million during the current fiscal year. The company had earlier projected a \$90 million profit.

### Microsoft, Qwest Sign Services Pact

Microsoft Corp. and Qwest Communications International Inc. are collaborating on voice-over-IP and other telecommunications services for small and midsize business customers. Qwest is the first service provider to use Microsoft's recently launched VoIP software suite. The first joint service suite will be out early next year.

### **Bull Buys Maker of** Single Sign-on Tool

Bull 5A bought Enatel SAS, maker of the WiseGuard single sign-on software suite. Bull said it made the move to strengthen the identity management and access control software suites sold by its Bull Evidian division, Enatel, led by three former Bull employees, specializes in access security systems. The companies didn't give financial details of the transaction.

### **Judge Approves WorldCom Payout**

A U.S. District Court judge has approved a \$6.1 billion settlement to investors who lost money in an accounting fraud at the former WorldCom Inc., now known as MCI Inc. Judge Denise Cote approved settlement payments of \$2 billion to J.P. Morgan Securities Inc. and \$325 million to Deutsche Bank Securities Inc. The settlement includes payments from former WorldCom directors, as well as former CEO Bernard Ebbers.

# Business Objects Updates BI Tool Set

New version adds functionality for nontechnical users

BY HEATHER HAVENSTEIN

USINESS OBJECTS SA this week will unveil a new version of its integrated business intelligence tool set that lets nontechnical users access BI data without having to write queries or build reports.

Business Objects XI Release 2 also adds wizards to allow users of reporting tools from the company's Crystal Decisions Inc. unit to more easily switch to the BI tools, according to company officials.

The release's new Intelligent Question feature lets nontechnical users type in

simple requests for specific data, said Lance Walter, vice president of product marketing at Business Objects.

Paul Zanis, director of corporate data architecture at Simon & Schuster Inc. in New York, expects the Intelligent Ouestion function to help expand the use of Business Objects BI software beyond a select list of power users at the publishing firm. He noted that the earlier versions require that users have some knowledge of underlying data to write a query. "We can use Simon & Schuster-type terms and allow users to ask questions without making them feel like they are going into a new application," he said.

Simon & Schuster has been using a beta version of the

new release; the company plans to upgrade to the final implementation within six months. Zanis added.

Keith Gile, an analyst at Forrester Research Inc., said it's vital that BI tools evolve to meet the needs of nontechnical business users.

### **Building a Data Pipeline**

Hao Ngo, information specialist at Aera Energy LLC in Bakersfield, Calif., said Release 2 provides the oil and natural gas producer with enhanced connectivity to SAP R/3 and SAP Business Warehouse

Ngo, who is evaluating the beta version of Release 2, said Aera was unable to easily link to the SAP AG applications using earlier versions of the

### **Business Objects** XI Release 2

Includes wizards that let users of Crystal Decisions re-porting tools or older BI tools to more easily upgrade to the new version

■ Includes unified metadata

■ Can integrate multiple data sources in a single report.

Business Objects BI tools.

With the beta version of the new release, the company didn't have to use extract. transform and load tools to gather data from back-end systems, he said.

"We are now able to easily query data directly out of data sources like SAP and BW ... where it at times required a full project to move the data to our custom warehouse," he said.

XI Release 2 is expected to ship in November: the first release shipped last December.

### BI Vendors to Add HP **OpenView Tool to Offerings**

Will give users real-time view of business processes

BY HEATHER HAVENSTEIN

Hewlett-Packard Co. last week announced that four business intelligence vendors have signed agreements to integrate the HP OpenView Business Process Insight tool into their offerings.

HP said the combined products will bring near-real-time visibility of business processes to the enterprise BI tools of Business Objects SA, Cognos Inc., Hyperion Solutions Corp. and SAS Institute Inc. Under the separate pacts, the BI tools of each company will be integrated with OpenView BPI by the end of 2005, HP said.

OpenView BPI, which was launched last year [QuickLink

47575], highlights activity within business processes. allowing operations teams to quickly note when business performance moves off plan so they can take immediate corrective action.

"We're unlocking a very specific type of data process information that [the BI vendors | wouldn't otherwise be able to easily get access to," said Yale Tankus, vice president of alliances and partnerships in HP's management software business team.

Dan Vesset, an analyst at IDC, said that OpenView BPI brings new functionality to the BI systems. These alliances mark the first efforts of BI vendors to merge process and transactional data for analytics, he said.

"It's a major attempt to automate the modeling and identification of business process-

### **HP Agreements**

Bl vendors' plans to add HP OpenView Business Process Insight to their tools:

**BUSINESS OBJECTS** will add OpenView BPI to its XI platform to link business performance management with business operations. COGNOS will add the tool to its scorecarding tools to help companies monitor, measure and manage performance using metrics. HYPERION will leverage HP's

tool to help users provide nearreal-time linking of operational and financial business plans with processes that deliver on those

SAS will use the tool to help users analyze and manage process cost at varying levels of granularity.

es," Vesset said. The combined systems can capture the associated process log-file data and make it available for reporting and analysis by BI tools, he said.

Combining the HP and BI systems may be too much for some IT operations, since defining a process across multiple servers is an extremely complicated task, Vesset added.

Paul Zanis, director of corporate data architecture at Simon & Schuster Inc. in New York, agreed that using such combined systems could be a problem at some sites. He noted that some corporate executives still view BI mainly as a way to obtain reports from transactional systems.

"We are still moving past businesses having their own siloed databases . . . into a central data warehouse world," providing an opportunity to convince executives of the need for such systems, said Zanis.

For instance, he said, as more users gain access to BI data from corporate portals. executives might warm to the idea of merging analytics with process data for making operational decisions. © 57027



## TAKE THE GUESS AND WORK OUT OF COMPLIANCE

Automatically enforce compliance with FileNet Records Manager and Email Manager

Putting compliance in the hands of business users is a chancy proposition. Filing errors, data loss, and inconsistent policy enforcement put you at risk. FileNet Records Manager and Email Manager automate your entire compliance process. You'll realize lower operational costs, greater proof of compliance with current and future regulations, and improved user productivity — all via a comprehensive system built from the ground up to work invisibly behind the scenes. Why you'd ever attempt compliance any other way is anyone's guess.

Learn how to make better decisions, faster.

Download the definitive Records Management

Guide at www.filenet.com/rmguide



1-800-filenet

www.filenet.com

2005 FileNet Corporation, All rights reserved



### An International IT News Digest

### Siemens Unit Plans Job Cuts, Replaces Top Exec

IEMENS BUSINESS SERVICES GMBH (SBS), the money-losing IT services arm of Siemens AG, will cut 2,400 jobs over the next two years, ending months of speculation that layoffs were looming at the unit.

Siemens said last week that it's aiming to slash annual costs at Munichbased SBS by 1.5 billion euros (\$1.8 billion U.S.), with the bulk of the savings coming from the job cuts.

Klaus Kleinfeld, president and CEO of Siemens, also disclosed during a conference call that the unit's 60 IT services facilities in Germany — its

core market — will be consolidated into 20 locations. The restructuring efforts are primarily focused on the underperforming enterprise networks division of SBS, Kleinfeld said.

In addition to announcing the planned job cuts, Siemens named Christoph Kollatz to replace Adrian von Hammerstein as group president of SBS. Kollatz previously was head of the traffic systems division at Siemens.

JOHN BLAU, IDG NEWS SERVICE

### EDS Lays Off Australian Employees After Dispute

SYDNEY, AUSTRALIA

LECTRONIC DATA SYSTEMS CORP. has eliminated 106 application development jobs in its Australian operations, less than a month after the unit's employees rejected a new contract offer from the outsourcing and IT services vendor.

An EDS (Australia) Pty. spokeswoman said last week that the layoffs were "absolutely not" implemented

in response to the unionbacked vote, which threw out a company-proposed deal that would have frozen wages in exchange for improving some employee benefits [Quick-Link 56537].

The public acrimony between EDS Australia and its employee union is partly based on what the unit's executives regard as

an unwanted intrusion by groups such as the Association of Professional Engineers, Scientists and Managers Australia in the contract negotiations.

COMPUTERWORLD TODAY (AUSTRALIA)

### Cypress Adds Workers, Chip Facilities in India

PRESS SEMICONDUCTOR CORP.
plans to invest 430 million Indian
rupees (\$10 million U.S.) to build
a new office campus in Bangalore that
will be the site of strategic product-

will be the site of strategic productdesign projects. San Jose-based Cypress said it expects to employ 600 workers at the campus by the end of 2007, tripling its Bangalore workfore.

Paul Keswick, executive vice president of new product development, engineering and IT at Cypress, said at a press conference that the existing design center in Bangalore is already the largest of the company's 18 design centers worldwide.

The Indian operation specializes in designing products such as Universal Serial Bus chips and static RAM devices, as well as computer-aided design tools. It also handles some of the company's internal information systems requirements. Q 56975

JOHN RIBEIRO, IDG NEWS SERVICE

Compiled by Mike Bucken.

### **Briefly Noted**

SAP AG has agreed to acquire Trivorsity Inc. a Toronto-based vendor of retail software. SAP said the deal will help expand its IT offerings for the retail industry, especially pointof-sale systems. Forms of the deal, which is expected to close next month, weren't disclosed.

■ JOHN BLAU, IDG NEWS SERVICE

LogicaCMG PLC, a London-based
IT services vendor, plans to buy
Paris-based Unilog SA for 930 million euros (\$1.14 billion U.S.). The
purchase offer is subject to the approval of LogicaCMG shareholders
and relevant regulatory authorities,
Unilog said. The deal is expected to
close by the end of next month.

■ PETER SAYER, IDG NEWS SERVICE

The European Commission has proposed that its member nations reimburse telecommunications network operators and internet service providers for the cost of collecting and storing data to help authorities track terrorists. The proposal calls for companies to be compensated for doing data storage tasks that go beyond their current practices.

■ SIMON TAYLOR, IDG NEWS SERVICE

### **HP Adds Switches, Software for Network Edges and Wireless LANs**

Projected growth in

overall revenue from sales of external disk

storage systems in the Asia-Pacific region

this year

Says new InterConnect Fabric Switch line offers more resiliency, flexibility

### BY MATT HAMBLEN

Hewlett-Packard Co. today will announce a set of hardware and software designed to advance its network edge strategy, including two models of a new ProCurve InterConnect Fabric Switch that provide high availability, resiliency and automatic configuration features.

Also included are an upgrade of HP's ProCurve Identity Driven Manager software, which handles end-user access rights, and a new tool called Mobility Manager, for controlling Wi-Fi access points, said Darla Sommerville, vice president of the company's Pro-Curve unit in the Americas region. A power-over-Ethernet switch designed to simplify the deployment of wireless access points will round out the product announcements.

The InterConnect Fabric Switch 8100fl family was developed using technologies that HP purchased from Riverstone Networks Inc. in June 2004, Sommerville said. One of the two new switches has eight slots, and the other has 16. HP is also announcing seven modules that fit into their

chassis. The modules offer Gigabit and 10 Gigabit Ethernet capabilities and have redundant power and other features. The switches start at \$27,999, and the modules range in price from about \$3,000 to \$20,000.

Chuck Sears, manager of research computing at Oregon State University's College of Oceanic and Atmospheric Sciences, has tested and deployed one of the new switches with a 10 Gigabit Ethernet module as part of a network that includes other ProCurve devices. The 8100fl "forms the pillar of our interconnect" for scientists who are processing oceanographic data, he said.

In all, about 500 end users are using the network, accord-

### NEW HARDWARE

HP's ProCurve InterConnect Fabric Switch family includes the following models:

- The 8108fl (below), an eightslot chassis switch with one pow er supply. **Starts at \$27,999**.
- The 8116fl, which has a 16-slot chassis and dual power supplies. Starts at \$38,999.



ing to Sears. Because of its flexibility, the new switch can help the college "adapt and repurpose based on our business needs," he said, adding that a built-in management module is a "big win" for users.

Rob Whiteley, an analyst at Forrester Research Inc., said the 8100fl is an improvement over HP's existing technologies because it puts redundancy, software modularity and performance management functions in a flexible chassis.

Whiteley added that the Mobility Manager 1.0 software could be even more useful because it offers a single management console for devices on both wired and wireless networks. But because Mobility Manager isn't due to ship until December, HP "won't have much of a competitive advantage," Whiteley said. He noted that Cisco Systems Inc. is developing similar functionality using technology it acquired with Airespace Inc. last March. 0 57056



# SIX TIME ZONES AWAY. CLICK. DONE

### HP PROLIANT BL20p G3 BLADE SERVER

### with ProLiant Essentials Management Software

- Up to 2 Intel<sup>®</sup> Xeon<sup>™</sup> Processors (3.60GHz/2MB)<sup>1</sup> High density: Up to 48 servers per rack
- Flexible/Open: Integrates with existing infr
- HP Systems Insight Manager™: Web-based remarked management through a single console
- Rapid Deployment Pack: For ease will deployment and
- ongoing provisioning and reprovisioning ted Cisco or Nortel switch options



### HP STORAGEWORKS MSA1500cs

### Get 2TB of Storage Free (\$2,800 Value)<sup>2</sup>

- Up to 24TB of capacity (96 250GB SATA drives) Up to 16TB of capacity (56 300GB SCSI drives)
- Ability to mix SCSI and Serial ATA enclosures
- for greater flexibility
  2GB/1GB Fibre connections to host

The HP ProLiant BL20p G3 blade server with the Intel® Xeon™ Processor simplifies server management. In fact, it's so simple, you can even manage it remotely through leading Web browsers using HP iLO technology. And not only is it simple to manage, it's also simple to monitor and set up. It all starts with the Rapid Deployment Pack, giving you an automated setup process to configure and deploy servers at high volume and a rapid pace. Then HP Systems Insight Manager™ gives you a real-time overview of system performance, even alerting you to potential problems before they occur. Plus, you can bundle it with the HP StorageWorks MSA1500cs to make staring your data simple, scalable and affordable. So with HP, you get more expertise before you buy, more technology when you do and more support after. Wherever you happen to be.

SMART ADVICE > SMART TECHNOLOGY > SMART SERVICES

Download a free IDC white paper: Reducing Total Cost of Ownership Through the Use of Blade Systems.

Save \$750 instantly a blade enclosure so Web site for detail

Call 1-877-342-1779 Click hp.com/go/bladesmag19 Visit your local reseller



rough 10/3/10/6. All this analizer from P Dect unit perfoculing meters. Phose hower are HP Dect prices, are subject to disripe and in not invite applicable state and lead sales fair or inventing to opport 5 continuous. Note that we want to opport the prices may very 5 be wide site for full distant. Protograph may not accurate any configurations priced. Associated sales represent HP published its gives. Investigation in the Children of the Chi

Continued from page I

### Metrics

mance indicators, such as the effect that security problems have on internal business processes or the availability of applications to end users.

"Most metrics only indicate that a security program is doing the things it needs to do," said Scott Blake, chief information security officer (CISO) at Boston-based Liberty Mutual Insurance Co. "It doesn't get us to a point where we have a real understanding of the risks to the data."

For instance, metrics that measure compliance with internal requirements or the time it takes to patch systems

### Security

- III The annual number of information security incidents.
- . The business impact of securi-
- = Enterprisewide awareness of the information security program.
- The accuracy of security threat
- Reductions in incident management and response costs.

might offer good insight into how effectively a security program is working, Blake said.

"But in my mind, it only tells us that we are doing things," he added. What's really needed, Blake said, is insight into whether the overall risk to business operations has been reduced as a result of investments in IT security.

### **Oualitative Assessments**

The key is to focus on metrics that demonstrate "quality of accomplishment," said Nancy DeFrancesco, CISO at the U.S. Department of Commerce in Washington. "Metrics are extremely important, but you need to have both quantitative and qualitative ones.'

For example, DeFrancesco said, in addition to having a set of quantitative metrics, it helps if a security staff can show that it has a repeatable process in place for handling security incidents.

"A quantitative measure may indicate your posture at one point in time, whereas a qualitative measure would promote the overall maturity of your IT security organization," she said.

Technology-oriented metrics can give IT staffs "important data points to either validate or invalidate" questions about issues such as attack trends, said John Pironti, principal security consultant at

### **Software Flaw Rating System Ready for Testing**

AN INDUSTRY GROUP that for the past six months has been developing a common system for rating software flaws announced last week that its proposed approach is ready for broader testing by vendors, corporations and security researchers.

The Common Vulnerability Scoring System (CVSS) is designed to replace the proprietary vulnerability rating systems that vendors now use. The standardized system was commissioned in January by the National Infrastructure Advisory Council, a group of 30 companies that advises President Bush.

The participants involved in developing the CVSS include Cisco Systems Inc., Internet Security Systems Inc., Qualys Inc. and Carnegie Mellon University's CERT Coordination Center. The standard is being managed by the Forum of Incident Response and Security Teams (FIRST), a not-for-profit organization in

Unisys Corp. in Blue Bell, Pa. But because those metrics don't give a picture of the true

business impact of security investments, it's also necessary to track key performance indicators on the business side and show how attacks against pieces of a company's IT infrastructure can affect operaResearch Triangle Park, N.C.

Mike Caudill, chairman of FIRST and a member of Cisco's security response team, said the development of the CVSS is "an attempt to bring some order to the chaos" that currently exists around vulnerability ratings. The standardized approach should help IT managers better prioritize their responses to software flaws by giving them a better idea of the security risks their companies face. Caudill said.

The system uses a scale of 1 to 10 to rate the severity of vulnerabilities and lets users add information that's specific to their IT installations to arrive at a customized risk score

Cisco has already begun testing the CVSS on its security Web site. Caudill said. And by year's end, Redwood Shores, Calif .based Qualys plans to start using the new system for rating vulnerabilities as part of its managed security services, said Gerhard

Eschelbeck, the company's chief technology officer.

But some issues have to be resolved before the CVSS is ready for broad use, said Jeff Havrilla, vulnerability team leader at CERT. There still needs to be general agreement on all the attributes that have to be considered when rating a flaw's severity and on the semantics for describing the attributes. Havrilla said. He added that tools are needed to automate the scoring process.

The rating system also needs to attract support from other major software vendors, including Microsoft Corp. In a statement sent via e-mail. 

Microsoft spokeswoman said that the company has no immediate plans to adopt the CVSS.

"It's still somewhat of a work in progress, but it is an incredibly important effort," said Michael Gavin, an analyst at Forrester Research Inc.

- Jaikumar Vijayan

tions. Pironti said. Examples include measuring the amount of time that end users are unable to access their systems because of a worm infection, or tracking the number of complaints resulting from systems being unavailable to users, he said.

"Business managers defi-

nitely want to be talked to in business terms," Pironti noted. "They want to know how a business process might be affected by a potential threat."

Focusing on measuring only the work that's being done internally to protect systems gives security managers little of the information they need to respond proactively to changing business needs, said Howard Schmidt, a former White House cybersecurity adviser who is now CEO of **R&H Security Consulting LLC** in Issaguah, Wash.

A corporate security team might be able to demonstrate that its perimeter defenses blocked more than 15,000 viruses during a specific period, Schmidt said. "But how do you measure how many infections you prevented by blocking all those viruses?" he asked.

Another challenge "is that often you can measure a negative [event] but not a positive one," he added. As a result, it becomes very difficult to demonstrate the business value of security programs, Schmidt said. © 57057

### **Mortgage Broker to Deploy** Hosted CRM for 5.000 Users

Allied Home Mortgage Capital Corp. has 600 branch offices across the U.S. that use a variety of CRM systems. But the mortgage broker now plans to standardize on a set of hosted applications that's expected to eventually be used by 5,000 of its employees.

The Houston-based company will deploy the hosted software from Entellium Corp. for 2,000 end users by year's end, CIO David Langston said last week. He expects to add another 3,000 seats during the course of Allied's three-year

contract with Seattle-based Entellium, which announced the deal last week.

Liz Herbert, an analyst at Forrester Research Inc., said the 5,000-seat project is a large one in the hosted CRM market, where the industry average for deployments is only about 20 users. Salesforce.com Inc. is the only other vendor that has been announcing deals on the scale of the one at Allied, she added.

Langston said a hosted system seemed like a good fit for Allied because of its widely distributed business opera-

tions. The hosted approach should make it easier for his IT staff to deploy and maintain the applications, he said.

The company considered building its own CRM applications, but Langston decided that his 16-person IT staff could better spend its time in other areas. "As CIO, I'm not really reluctant to take on that kind of challenge," he said. But the features in Entellium's software made it unnecessary to "burden our staff" with an internal development project, Langston said.

The price that Allied is paying for the hosted software wasn't disclosed. List pricing for Entellium's PRO-Activity software, which includes sales

force automation and call center modules, starts at \$59 a month per seat.

Allied currently uses Front-Page Solutions USA Inc.'s GoldMine software at many of its branch offices, but company officials wanted new features such as tools that can automatically generate birthday cards and other personal mailings to customers.

Another shortcoming of the existing CRM systems is that many branches have had to devise their own custom tools or go without if they lacked the technical skills to create them. Langston said Entellium will provide needed customizations after the initial deployments. © 57023

### You have a printing emergency. Your printer has a printing error. Again.

(Isn't it time for a printer you can rely on?)





### HP Color LaserJet 4730 mfp

Style Making an inter-controller Print, scan to a mail, one copy in this limit, the new HT Cube in the Print Print

- Copy of annispend on the Bloom
   Print of the Copy with HP ImageREt 3601
   Scan resolution up 600 X 600 the Plant of Ethernet ports
   Type of the Copy of the Copy



### **HP Color LaserJet 3550n Printer**





### HP LaserJet 2430n Monochrome Printer





### You can't afford not to buy an HP printer.

After 20+ years in the business, HP printers are the gold-standard for reliability. That's very PC Magazine gave only HP printers A's for service and reliability 12 years running. And that's just one of the ways HP saves you now and for years to come. Get the reliability you need. Get an HP printer from CDW.



The Right Technology Right Away. CDW.com • 800 399.4CDW

# SOMEDAY, THE PROMISE OF BI WILL BE MET. WELCOME TO SOMEDAY.

Business Intelligence made a promise: to make it simple for everyone to use information to make better decisions. But, given your complex IT infrastructure, the reality of getting a single BI standard in place across the company has been anything but simple. Until now.

Introducing Cognos 8 Business Intelligence, the one solution built to break down the barriers limiting BI's potential. With a complete Web Services-based SOA. A simple browser-based interface. A full range of BI capabilities — reporting, analysis, scorecarding, dashboarding and more — all in a single product and on a single architecture. And the BI foundation for companies demanding a simpler path to a complete performance management system.

It's everything BI promised to be. And now, it's here. Learn more today at cognos.com/simple

COGNOS 8 BUSINESS INTELLIGENCE.

MITATIONS. NO IMITATIONS.

San Francisco

GLOBAL TOUR

Atlanta
Boston
Calgary
Charlotte
Chicalo
Chicalo
Chicalo
Ballas
Benver
Detroit
Washington D.C.
Edmonton
Fort Lauderdale
Halifax
Hartford
Hartford

Hamburg
Helsinki
Lanamu
Lejazig
London
Lyon
Masheld
Mashe
Manchester
Stavanger
Stockholm
Stattgart
Utrecht
Vienna
Warzaw
War

### More Flaws in Firefox Than IE, Symantec Says

Numbers don't tell the whole story. analysts caution

BY TODD II. WEISS

N ITS semiannual report about Internet security threats, released last week. IT security vendor Symantec Corp. said the opensource Firefox Web browser had more confirmed vulnerabilities than Microsoft Corp.'s Internet Explorer did in the first six months of the year.

But Symantec and security analysts said the vulnerability data doesn't necessarily mean that Firefox is less secure than its proponents have claimed or that Internet Explorer is a safer browser than many users believe it to be.

Cupertino, Calif.-based Symantec reported that during the first half of 2005, 25 vendorconfirmed vulnerabilities were disclosed for Firefox and other browsers based on the Mozilla open-source technology, including 18 flaws classified as highly severe. During the same period, Microsoft confirmed 13 holes in Internet Explorer, eight of which were deemed to be highly severe,

according to Symantec. And just last week, the

Mozilla Foundation released a new version of Firefox that includes fixes for two critical security bugs that were discovered this month (see chart).

However, the vulnerability numbers don't tell the whole story, said Vincent Weafer. senior director of Symantec's Security Response Team. He noted that the widespread use of Internet Explorer means vulnerabilities in Microsoft's software have the potential to

affect a much larger user base than flaws in Firefox do. "No technology by itself is safer," he said. "It really is about securing it all to the max.'

"The whole game we play about counting vulnerabilities is kind of silly to begin with," said Pete Lindstrom, an analyst at Spire Security LLC in Malvern, Pa. He added that the IT security community as a whole "ought to be slapped on the wrist for saying Firefox was more secure than IE" when the open-source browser was

### Flaw Fixes

- A vulnerability in the la to take control of features and launch buffer overflow attacks.
  - A flaw in the way Firefor

released late last year.

Weafer and Lindstrom both said that users need to ensure that every software product is properly configured for de-

fense. "If someone wants to, they can protect their applications," Lindstrom said, though it costs money and takes time to do it properly.

Mike Schroepfer, director of engineering for the Mozilla project, questioned Symantec's vulnerability numbers, saving that Microsoft and the open-source group report security flaws differently.

Microsoft tends to group several confirmed vulnerabilities together, whereas Mozilla announces each one individually, Schroepfer said. That skews the number of confirmed flaws, he claimed.

O 56987

Robert McMillan of the IDG News Service contributed to

### Mozilla Faces New Challenges on Firefox

WHEN VERSION 1.0 of Firefox was released last November, it caused a sensation as a seemingly more secure and featurerich alternative to Internet Explorer. Since then, Firefox has achieved what no other browser had accomplished in years: attaining a sizable market share at Internet Explorer's expense.

Firefox now holds between 7% and 9% of the Web browser market, according to various research estimates. But as the open-source browser nears its

first birthday, the Mozilla Foundation faces significant challenges, analysts said last week. Those include the need to quickly discover and fix security vulnerabilities, compete against an upcoming Internet Explorer upgrade and broaden Firefox's user base beyond its initial core of technically savvv users

Mozilla isn't standing still. The first major Firefox upgrade, Version 1.5. is now in beta testing and is due for general release in November or December.

Firefox 1.5 features better usability, performance, extensibility, security and privacy, as well as faster Web navigation, said Chris Beard, head of products and marketing at Mozilla Corp., the entity set up by the Mozilla Foundation to develop, market and distribute

Ray Valdes, a Gartner Inc. analyst, said Firefox 1.5 includes "improvements that are necessary and valuable but not necessarily compelling." Valdes predicted that the upgrade won't

re-energize the growth in Firefox usage, "which is going through a natural slowing down that happens with maturity."

Microsoft has started testing a new version of Internet Explorer that was added to its product plans earlier this year.

The real question is, how well will Firefox fare against a reinvigorated IE?" said Michael Gartenberg, an analyst at Jupiter-Research in New York. "For many users. IE 7 will address some of the key reasons why they may have looked at Firefox.

> - Juan Carlos Perez, IDG News Service

### **Hospital Set to Roll Out Digital Records System**

St. Joseph's expects to cut costs and medical miscues

BY LUCAS MEARIAN

St. Joseph's Hospital Health Center, a 430-bed facility with 6,000 employees in Syracuse, N.Y., last week said it plans to complete work on a new \$1 million digital records and storage system within 30 days.

In March, St. Joseph's start-

ed the project to move from a manual system to speed up and expand access to medical records and radiology charts, officials said.

The hospital's belief that the move will substantially cut storage costs is realistic, at least according to a Rand Corp. study that concluded that digitizing medical records in the U.S. could save the health care industry about \$81 billion annually while helping med-

ical practitioners avoid mistakes. The two-year study, released last week, found that electronic medical records systems can reduce redundant care, speed patient treatment and improve safety.

"Our findings strongly suggest that it is time for the government and others who pay for health care to aggressively promote health information technology," said Richard Hillestad, a senior management scientist at Rand in Santa Monica, Calif.

The new St. Joseph's system uses a picture archiving and communications system (PACS) that saves and searches for

medical photographs, said Christopher Ryan, manager of IT at St. Joseph's. The hospital bought the system from San Francisco-based McKes-

The back end of the PACS setup includes a tiered storagearea network (SAN) that was built around several IBM disk arrays, including a highend Enterprise Storage Server for primary storage, a midrange DS4300 for secondary storage and an entry-level DS4100 for online archiving. The entire SAN will provide about 15TB of capacity, according to Ryan.

The IBM storage systems

replace a single, outdated midrange array from EMC Corp., he said.

"It would have been easier to go EMC because we had one in place, but the value-add with IBM was its services and support," Ryan said. "EMC at the time was outsourcing their service, and this was causing an issue for us."

Rvan said the new technology will allow physicians and lab technicians to access patient information, data and X-rays in seconds via a Web portal. He added that he expects a return on the \$1 million investment in about three

years. 6 57005



IBM LOTUS NOTES & DOMINO PRESENT

# YOU VS YESTERDAY'S MESSAGING, TOMORROW'S DEMANDS

BUSINESS-CRITICAL COLLABORATION TAKES ON WEAK-KNEED PRODUCTIVITY!

FEATURING SPECIAL GUEST:

THE NEW LOTUS NOTES & DOMINO 7 \* BEYOND E-MAIL, BEYOND CALENDARING, BEYOND "IT'LL DO"

WITH: SUPER HEAVYWEIGHT SECURITY
FEATURES / EFFORTLESS MANAGEABILITY /
CONTINUING INNOVATION
FOR BUSINESS-CRITICAL COLLABORATION

# KNOCK-OUT APPLICATION DEVELOPMENT TOOLS

LOTUS NOTES & DOMINO 7 - A MEMBER OF THE IBM® WORKPLACE" FAMILY

★ IBM MIDDLEWARE. POWERFUL. PROVEN.★

FIGHT BACK AT WWW.IBM.COM/MIDDLEWARE/PRODUCTIVE ALL CHALLENGERS WELCOME

IBM, the IBM logo, Workplace, Lotus, Lotus,

### HP Plans to Acquire Peregrine for \$425M

Will add asset management tools from troubled vendor to its OpenView suite

BY CHINA MARTENS

EWLETT-PACKARD Co. last week agreed to acquire IT asset and service management software vendor Peregrine Systems Inc. for \$425 million in cash.

HP said it plans to integrate Peregrine's products into its OpenView systems management suite — a task that might be easier said than done, said Richard Evenson, an analyst at Technology Business Research Inc. in Hampton, N.H.

In the past, HP has had difficulty integrating outside software, he noted. In this case, the fact that Peregrine has a strong relationship with IBM "could make integration more challenging," Evenson added. Overall, he said, any success will "depend on HP's ability to integrate Peregrine's software into OpenView." HP expects to close the Peregrine deal during the first quarter of 2006.

"The timing was right to pursue Peregrine," said Todd DeLaughter, vice president and general manager of HP's management software business. He said asset management is a key component of the company's so-called Adaptive Enterprise strategy [QuickLink 54828].

Peregrine's products are
"the keys to putting the IT safe
firmly back in the hands of the
CIO" — letting them keep a
close eye on asset management within their organizations, he said.

"This acquisition makes sense" because it will bring a set of "process engine" functions to OpenView, said Don Casson, CEO of Sterling, Va.based Evergreen Systems Inc., a Peregrine product reseller. San Diego-based Peregrine, which employs about 7/00 people, has had a troubled financial and legal past. The company filed for Chapter II bankruptcy protection in September 2002 after accounting irregularities led to an investigation by the U.S. Securities and Exchange Commission. Eight former Peregrine executives were indicted on fraud charges last October by a federal grand jury [QuickLink 49903].

After halving its staff and selling its Remedy Corp. services business to BMC Software Inc., Peregrine emerged from Chapter II in August 2003 and has been restating its SEC financial filings ever since.

DeLaughter said HP has been closely monitoring Peregrine's financial status, and "we've confirmed there's no unknown risk."

### **More Likely Buyer**

Given its long-standing close relationship with Peregrine, IBM might have seemed a more likely buyer, observers said. However, DeLaughter downplayed the June expansion of a strategic alliance between IBM and Peregrine as simply renewing an existing agreement between them.

"Our intention is to support IBM customers and IBM Global Services," DeLaughter said. "Going forward, we'll use HP's own services arm" to provide support.

While he acknowledged that there is some overlap between HP's and Peregrine's service management software offerings, DeLaughter said HP has a road map to merge Peregrine's ServiceCenter with its own Service Desk products. That road map will be put in place once the deal is approved, he said.

There is no overlap of HP products with Peregrine's AssetManager, which will form the basis for HP's asset management strategy, De-Laughter said.

HP is hoping that the majority of Peregrine staffers come over, particularly those in product development, sales and marketing, DeLaughter said. "Peregrine has a lot of depth and talent at the management level," he added. "We'd like to bring on as many of them as we can." © 56991

Martens is a reporter for the IDG News Service.

### Lawyer Tackles Complex Software Licensing Issues

BY THOMAS HOFFMAN

Software licensing agreements can be mind-boggling for even the most well-informed IT executive — with hidden traps in

utive — with hidden trap vendor contracts and variances in the types of agreements offered. Add regulatory compliance requirements and other wrinkles like multicore processors, and it's not surprising that even savvy IT pros can have trouble navigating these shark-infest

can have trouble navigating these shark-infested waters. Peter Frazza, chairman of the computer law group at law firm Budd Larner PC in Short Hills, N.J., which is launching seminars on the subject next month, spoke to Computerworld recently about licensing trends.

Are there any examples of recent cases you were involved in that were unique or reflect a new trend in software licensing agreements? As normally is the case, at least in my experience and my firm's experience, most of the cases end up being set-

tled. That's not unique to software licensing litigation; it's just the way of litigation these days. So the long answer is that the majority of the

cases I've handled over the past couple of years never end up getting tried. The parties come to an amicable resolution. You never know how the case might've turned out. So I can't tell you of any particular trend that I'm see-

ing, since most of the cases are settling.

What is the direct or indirect impact on software licensing from regulatory compliance requirements such as the Sarbanes-Oxley Act? I'm not a Sarbanes-

Oxley expert, but vendors are raising Sarbanes-Oxleyrelated issues with increasing regularity during contract negotiations, whether it's in revenue-recognition issues or confidentiality-type issues.

Sometimes I don't quite follow why it's an issue from the vendor's standpoint. Then a lawyer needs to turn to the compliance people for a client and ask if this is an issue that needs to be addressed or not addressed. How and whether it's going to creep into software licensing, that question is still evolving.

Are enterprise customers expressing angst regarding licensing provisions for multicore processors? Dual core and multicore is obviously a very hot area. I have one case that has some peripheral dual-core and multicore processing issues. But I see that the greater challenge [is] on the drafting and negotiating side than on the litigation side.

My guess is that this may be an issue that begins to be litigated more in the future when multicore processors are more extensively used. It's a much greater negotiating and drafting challenge than a litigation challenge.

There's more and more dual and multicore processing that will be out there in a few years than there ever has been before. I'd like to get involved in a nice, complex case like this to help get a better handle on the nuances of the drafting.

### **HP Buys SRM Vendor ApplQ**

HEWLETT-PACKARD last week agreed to buy storage resource management (SRM) vendor AppIQ Inc. for an undisclosed sum. HP plans to use the AppIQ tools in an effort to create a single management interface for all its server and storage products.

HP has been reselling Burlington, Mass.-based ApplQ's StorageAuthority SRM offering as its Storage Essentials product under a joint development, marketing and services delivery agreement signed in February.

With the purchase, HP plans to integrate all of ApplQ's SRM technology into its Systems Insight Manager tool for HP servers and storage arrays.

Joe Clabby, a research ana-

lyst at Summit Strategies Inc. in St. Louis., said the ApplQ acquisition is a "great leap forward" for HP. The company "already had [the] ability to discover and monitor and manage systems [manually]. Now they can automate that management." he said.

Clabby said he expects that ApplQ will retain its reseller pacts with HP rivals EMC Corp., IBM, Hitachi Data Systems Corp. and Network Appliance Inc. because each needs the ApplQ technology.

"We intend to keep each of our other [resellers] and use the channel as a key business value," said ApplQ's chief technology officer, Ash Ashutosh.

- Lucas Mearian



WebSphere



IBM WEBSPHERE PRESENTS

A HASTEN, CASIDI WAY TO 1 IMPLEMENT TRUE SOA

UNPARALLELED INDUSTRY KNOWLEDGE & PROCESS BAILL

IBM MIDDLEWARE, POWERFUL, PROVEN.
FIGHT BACK AT WWW.IBM.COM/MIDDLEWARE/SQA. THIS IS A RIP-AND-REPLACE-FREE EVENT.

DON TENNANT

# IT Separatism

COUPLE OF WEEKS AGO at a dinner event that was part of Computerworld's Enterprise Management World conference in Bethesda, Md., I was sitting at a table across from Robert Taylor, CIO of

Fulton County, Ga. Taylor was there to receive his Best Practices in Enterprise Management award in the "Distributed Systems and Infrastructure Implementation" category. Before I even became familiar with his winning project, I had a feeling that the judges got this one right.

For starters, Taylor's resolve and resourcefulness

became evident when he mentioned that his travel budget is so tight that at first he didn't think he'd be able to receive the award in person. But with some persistence, he managed to find a flight priced below the \$200 limit set by the county, and he was able to stay with a relative in the area rather than at the posh hotel where the event was held.

As the table conversation continued, I learned that it's not just Taylor's travel budget that's tight. Being in the public sector means he has to squeeze a whole lot of value out of every dollar in his entire IT budget, because those are taxpayer dollars. An EMC executive who was also sitting at the table and who has Fulton County as a client chuckled over how tough Taylor is when it comes to negotiating contracts. Taylor seemed to take pride in that fact, noting that he uses any tool at his disposal to get vendors to cut him a sweet deal. For example, an industry award like the one he was receiving that evening could be leveraged to raise the profile of his operation. He could in turn convince vendors that having such a high-profile client using their products and services would be in their best interests. Cha-ching.



Certainly, there are plenty of CIOs in the private sector who have tight TT budgets and who could benefit a lot by getting a peek into Taylor's toolbox. And no doubt there's plenty that Taylor could learn from his private-sector peers as well. Conferences like the one where Taylor and other Best Practices award winners were

honored help by providing a forum for cross-sector networking. But there remains more of a gulf between public- and private-sector IT professionals and operations than there should be.

I'm not saying there aren't differences between the two. As Marc L. Songini reports in his story "Public-Sector Blues" on page 49, Marion County, Ind., found out the hard way that financial applications from

SSA Global Technologies are suited to corporate accounting but not to how county court clerks do their work. Terry Kline, who was an ERP project manager for Cumberland County, Pa., and previously worked in the private sector, noted that IT projects in the public sector tend to have more bureaucracy and fewer resources.

It's unfortunate that such differences seem to have created an IT separatism that too often restricts opportunities for technology professionals in the two sectors to interact and share experiences. With integration being a top concern of corporate CIOs, what company wouldn't benefit from, say, a peer-to-peer look at how the Department of Homeland Security is integrating the systems of two dozen government agencies?

Differences are what enable people to learn from one another. They're a reason to bring people together, not keep them apart. Congratulations, Robert. Not just for the award, but for demonstrating that fact. © 57006

Don Fernant



THORNTON A. MAY

### Sizing Up the Next-Gen IT Workscape

CONSEQUENCE of operating in a global economy is the need to periodically get on a plane and "be" global. Upon entering some distant land, business travelers are required to fill out a form that asks them to state their occupation. When confronted with this innocent enough request, how do you respond?

Many in our profession blithely scribble "IT" and move on without really thinking about it. This is a mistake.

Each and every one of us has to think much harder and much deeper about what IT people actually do for a living. We need to be a lot more reflective about our career identities. Lead-

ers need to be much more proactive and articulate in describing the evolving IT workscape (that is, IT work, workers and work processes).

In the days of Thoreau and Emerson (the American Renaissance, 1830-65), it took two men, using a two-man saw, all day to cut a cord of wood. No ambiguity about it. At day's

end, they either did or did not have a cord of wood and were paid accordingly. They knew the meaning of a day's work.

Many of the wonderful IT people I encounter in my travels and research not only have trouble answering the occupation question, but also are less than pithy when describing for executives what a day's work in IT actually is. They are frequently rendered mute when trying to explain to spouses, significant others and children just what they did in a given day.

This lack of clarity is not a problem of opon communication skills. It is a problem of trying to use old words and frameworks to describe a totally new world. At the essence of our being, we all know that the IT workscape has undergone and continues to undergo a



HORNTON A. MAY is a longtime industry server, management onsultant and comentator. Contact him horntonamy col.com

foundational metamorphosis akin to the changes involved as a caterpillar transforms into a butterfly or an agricultural worker in a rural village becomes a factory laborer in a city. We just don't have the language or the tools to describe what is happening - vet.

We have a pretty good sense that next-generation IT work, workers and work processes will be a very different animal than the function-by-function, piece-by-piece synchronized swimming that has characterized the previous and current generations of technology management. In that workworld-that-will-be-no-more, the alpha animal is the global project manager who alchemically drives programmers, architects, network engineers and hardware tuners to a presold but rarely delivered endpoint. The best time and place for viewing this doomed-toextinction occupational species in its natural habitat is Friday afternoon to early evening in the frequent-traveler lounges at major metropolitan airports. You will see their muscle-tonefree physiques hunched over as they take part in end-of-week project status conference calls, while pudgy fingers stuff bits of free cheese and crackers into nutritionally challenged mouths. A sad existence, to be sure.

Most of us have been way too busy to take the time to examine the new ecosystem that is the next-generation IT workscape. Very few have come to appreciate or study the emerging butterfly that is the new IT worker. Fewer still have mapped the forces coming together to shape the new world of IT work. Over the next several months, I intend to do so in this column. I hope you will join me on our journey of discovery. O 56916

VIRGINIA ROBBINS

### Standards And the IT Profession

N RESPONSE to my recent article "Fewer CS Majors Not a Big Concern" [Quick-Link 56361], a reader wrote that "the systems that support today's businesses do require highly skilled, experienced professionals to design, develop, enhance and maintain them." He went on to argue

that the best way to ensure that a company has highly skilled technical professionals is to hire computer science graduates.

I completely agree that today's businesses require highly skilled, experienced professionals. I remain unconvinced that hiring computer science degree holders is the best way to achieve that. At my firm, roughly half of my technical staff graduated with English

or other liberal arts degrees, and the other half have computer science, mathematics. MIS or other technical degrees. A smaller number have both. with either an undergraduate liberal arts degree and a technical master's degree or vice versa. I've found no correlation between degree and competency.

I'd rather have an independentstudies major who can work exceptionally hard to stay on top of technology changes, communicate well and think clearly than many of the computer science majors who elected to reply to my last column. One reader who identified himself as a computer science Ph.D. even accused me of being an academic on the basis that the word education is part of the name of the company I work for. That's an example



of not thinking clearly and not communicating well. A few seconds on Google would have left that reader with a very different impression.

I have found not only that a computer science degree is optional, but also that many successful technologists don't have any degree at all. I've had great employees who never finished college, and I've had wonderful employees who

have multiple master's degrees. Unlike other professions, such as accounting, law or medicine, technology has no uniformly accepted professional studies that must be completed before one can practice.

Passing the bar does not make one a good lawyer. It does prove, however, that an individual has demonstrated an ability to meet the minimum standards established by a professional body. In addition, the professions of accounting, law and medicine require lifelong continuous education in order to meet their professional criteria.

Many attempts have been made at creating certificate or professional programs in technology. A few, namely those sponsored by vendors, have proved to be popular, in part because they are useful in demonstrating that

an individual has mastered a particular topic

But it's no surprise that our profession doesn't have a universally accepted professional program. We are in a very young discipline. Many of the standards for law and medicine date to ancient Greece and India. The first accounting standards began with a book written by Luca Pacioli in 1494. In comparison, the first modern comput er arrived in the middle of the 20th century. Programming standards followed after that. We've been at this for only about 50 years, and it will probably take another 50 years to mature to the level where universally adopted practices are required.

In addition, law, accounting and medicine have universal standards in part because incompetence in those fields can ruin people's lives or livelihoods. Unfortunately, as we've seen with 9/11 and Hurricane Katrina we often need a disaster to drive people to do what they need to do. It may take a catastrophic technical problem for society to require technical certifications. In the meantime, I'll keep my experienced, skilled staff members, regardless of their degrees. O 56917

### **WANT OUR OPINION?**

More columnists and links to archives of previous columns are on our Web site: www.computerworld.com/columns

### **Swatting Bugs**

THIS ISN'T NEWS ["Buggy Software: Up From a Low-Quality Quagmire," QuickLink 55496]. Buggy software has been a problem since Ada wrote the first program. The solutions mentioned in the story are the same ones that I and others have been applying for years. The question is. Why is the problem getting worse when the solution has been known for years? That would be the story to write!

**Dewey J. Corl** Software QA, Portsmouth, N.H.

SUSPECT THAT this inflammatory article was written by someone attending CA and IBM sales pitches for their QA and development methodology products. The article states that "the problem, it seems, is only getting worse. According to one oft-quoted number from the National Institute of Stan-

dards and Technology, flawed software cost the U.S. economy \$60 billion in 2002." Where is the proof of this? I am not saying that bugs do not exist, but software bugs and omissions are a part of the development process. Millions of bug fixes. both major and minor, are made every day, and your reporter should report on that, rather than crying, "The sky is falling."

**Roman Victor** Software developer, RVPM Designs, Amherst, Mass.

BEING IN THE midst of a de-bate with a vendor over extremely poor customer service, I am thinking that we have only ourselves to blame. In the IT industry, we often rely on others to specify. design and build our applications. systems, etc. Then, when things don't go exactly as planned, the finger-pointing begins. "We'll fix that in the next release" tends to be my vendor's battle cry.

Is there a solution? I hope so. and I hope many of you will join me in requiring vendors to own up to their mistakes, provide working solutions that are fully functional as specified (for example: deduct 10% of purchase price as a penalty for each month the product is nonproductive), provide quality customer service without finger-pointing. and fulfill their end of the contract 100%. If we don't start holding them to a higher standard, how will they know they need to improve?

**Ken Montgomery** Network specialist, Wooster, Ohio

### Mac No Match for PC

N MY EXPERIENCE, both in the U.S. and Australia, the Mac OS has nowhere mean the level of penetration in large organizations that has been claimed in the Jupitermedia report ["Study: Apple's OS Making Inroads With Business,"

OuickLink 557541. I believe these are distorted numbers. The fact remains that Apple hardware is markedly overpriced for today's market. Penetration to those levels within large corporations will not occur until they become much more price-competitive.

### **Bob Sibson**

Manager, architecture and security, Adelaide, South Australia

COMPLITERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

For more letters on these and other topics, go to www.computerworld.com/letters

### SONY.

Give me mobility.

Thin and light form factors

Long battery life<sup>1</sup>

I want flexibility.

14" with modular bay

15.4" with modular bay

17" with modular bay

I demand security.

Biometric fingerprint sensor

Trusted Platform Module

I can't live without connectivity. Bluetooth® Technology2

Optional integrated wireless WAN<sup>3</sup>

Optional integrated camera

The Sony® VAIO® Professional BX Series Notebook, featuring Intel® Centrion® Mobile Technology for exceptional performance and productivity. Now every department, group, and individual in your organization has the power to handle the toughest applications with machines that offer extended battery life and sleek, lightweight designs. No other notebook boasts as many features.

Call **866-303-7669** Visit **sony.com/bx1** 

**V**10.

like.no.other

CODIS Since Pointment In All right in reliefs 1. (AD), with a place of faithment of Stay Hall, held Sign has a finite of the since of t

Sony recommends Windows<sup>e</sup> XP Professional.

A SINGLE BUSINESS NOTEBOOK SERIES EQUIPPED FOR EXCEPTIONAL PERFORMANCE, PRODUCTIVITY, AND FLEXIBILITY.



Juniper your Net. Tell me about it. I don't know Even the sloths
up on nine are
up on nine are
complaining, and
they never
say anything. about you Sam, but I've just about had it with this slow network

>> Remote sites running sluggishly? Juniper Networks' application acceleration solutions dramatically improve performance of your company's web site and networked apps. So everyone – internal and external – enjoys a dramatically better network experience. What's more, you'll simultaneously reduce network and infrastructure costs while improving productivity. Visit www.juniper.net/freetrial for your free trial and customized Network Health Report. Then quick! Juniper your net.



www.**juniper** net 888-JUNIPER (888-586-4737)

# **TECHNOLOGY**



**FUTURE WATCH** 

Supercomputer on a Chip

Computer scientists at the University of Texas at Austin (left) are working on a new microprocessor architecture. It's aimed at overcoming barriers raised by overhead and overheating and will eventually yield a trillion operations per second. Page 40

SECURITY MANAGER'S JOURNAL Compliance Focus Leads to Experiment in Cheap Films

Employees at C.J. Kelly's agency need to comply with HIPAA privacy and security rules. But the training materials are boring, so Kelly looks for a way to make the program interesting. Page 42

OPINION

Rise of the Virtual PC

For virtualization technologies, where desktop applications reside and where they run is becoming irrelevant, says Robert L. Mitchell. Page 46

# DECLINE OF THE DECLINE.

DESKTOP

The PC still rules the desktop — but not for long. Laptops, once considered an expensive luxury, will soon claim the mantle as the personal computing platform of choice in the enterprise.

FTER ALMOST a quarter of a century as the personal computing device of choice for business, the desktop PC is sliding off its pedestal. It has withstood assaults by technologies such as the Windows terminal, the Web and the network PC, but the mighty desktop has been humbled by user demand for the one thing it can't deliver — mobility.

The laptop, once a corporate status symbol, has already gained acceptance as a mainstream device. Now laptops are poised for a corporate takeover as enterprise use widens beyond its traditional constituents: traveling executives and other "road warriors."

The movement away from desktops has been under way for some time. Business use of laptops has risen from an average of one in every five PC users in 1999 to one in three today. That figure will pass the 50% mark in the next few years, according to IDC.

"When I first joined this organization in 2000, laptops were a novelty," says Jerry Polcari, director of IT at Harvard Pilgrim Health Care Inc. in Wellesley, Mass. At the time, just 2% to 3% of the health er's 1,800 PC users had lantons. h

in Weilestey, Mass. At the time, just 2% to 3% of the health insurer's 1,800 PC users had laptops, he says. "Now it's 54%. Any part of the workforce that's mobile or that does any kind of analytical work has a laptop," he says.



Harvard Pilgrim is ahead of the curve, but not too far out front. For several years, laptop sales have grown at twice the rate of desktop sales. "Last year, for the first time, we had higher dollar

sales of notebooks vs. desktops," says Robert Enochs, a ThinkPad product manager at Lenovo Group Ltd. IDC projects that by 2008 unit shipments of laptops will

eclipse those of their beige-box cousins. Laptop use is being driven by

changes in work habits as much as by advances in technology. And work habits are changing because wireless technology is breaking the link between location and connectivity. Increasingly, users expect to carry laptops with them on the road, at home and into meetings across campus, using wireless connections to facilitate collaboration as well as to keep up with e-mail.

Wi-Fi is expanding the adoption of laptops at Kichler Lighting Group in Cleveland. "The ability to undock your laptop and take it from conference room to conference room without ever leaving the network is powerful," says director of infrastructure Mike Sink. Today's laptops are also more likely to make it

Continued on page 33

There's "mobile technology"...



### ...and then there's Intel® Centrino™ mobile technology.

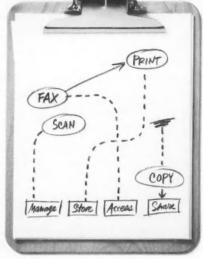
Intel® Centrino™ mobile technology for laptops is designed from the ground up to make anything else feel limiting. It delivers outstanding mobile performance. It enables great battery life in a new generation of thin, light, wireless laptops. And you don't need cables or wireless cards to keep your users connected.\*

Laptops to really mobilize your workforce:

intel.com/business.



# PLAYER





Global companies have teams everywhere. To help them share ideas, Xerox multifunction systems and software put everyone on the same playing field. There's a new way to look at it.

Running a global company requires secure worldwide information sharing. Luckily, Xerox has a solution for everyone on your team. Using Xerox multifunction systems and Xerox DocuShare® software, documents can be securely scanned to the Web. This way people throughout your global network can share them. This

keeps documents current, can eliminate warehousing needs by 70% and can reduce order fulfillment time by 80%. Whatever Xerox WorkCentre® multifunction system you choose, you'll reduce costs by printing, copying, scanning and faxing from one convenient network device. Now that's a game plan. To learn more, contact us today.

**XEROX** 

xerox.com/office/team 1-800-ASK-XEROX ext. 753

Technology | Document Management | Consulting Services

Continued from page 29

through back-to-back meetings on a single charge, thanks to newer designs based on power-saving technologies such as Intel Corp.'s Pentium M processor. "A typical notebook today will easily last you three to four hours, and in many cases five hours," says Steve Kleynhans, an analyst at Gartner Inc.

Wireless LANs make persistent connectivity possible and relieve users of the hassle of fiddling with wires and searching for a network jack. "It used to be that users needed [a laptop] to work from home. Now it's more of a mobility thing around the building,' says Paul Melnyk, director of the business technology group at Alias Systems Inc., a developer of 3-D graphics software in Toronto. Thirty percent of Alias' employees use laptops today, including 90% of its business staff. Melnyk expects overall laptop use to jump to 70% in the next three years as the company's developers embrace laptops.

"We have collaborative development spaces where people get together and do agile development work," Melnyk says. That collaborative model, which originated with software development, is spreading to other areas at Alias, he says,

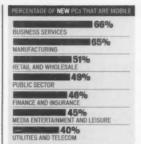
The price/performance gap between laptops and desktops has narrowed considerably, led by a rapid decline in the cost of LCD panels, which account for 60% to 70% of a notebook's cost, according to Forrester Research Inc. Some low-end laptops now sell for well under \$600. Forrester predicts that display costs will continue their fall through 2005.

Although the price gap has narrowed, desktops are still cheaper, especially for high-performance needs. Dell Inc. Vice President of Marketing Tim Mattox says the premium for laptops is about \$300 to \$500. However, laptop performance has improved to the point where a modestly priced unit has more than enough power to run typical of-

### Mobile PCs on the Rise

A 2004 survey compared mobile computer adoption by industry. It looked at PCs currently in use and new ones





### THE SECURITY CHA

WITH MORE THAN ONE in three users on laptops, securing mobile devices - and the data on them - is becoming more critical than ever. While IT can reimage a new laptop when a unit is lost or stolen, the challenge is protecting data on the missing system - and getting it back. The major laptop vendors all offer a range of security features and options. Here are some to consider:

### Authentication

Smart cards and biometric fingerprint readers can provide two-factor authentication for system access. Some lanton models. such as Lenovo's ThinkPad X series, can store passwords on a Trusted Platform Module (TPM) chip, rather than on the hard disk drive where it might be compromised.

Biometric readers have one advantage: Users never forget to bring their fingers. On the downside, biometrics have a falserejection rate of about one in 20, says a Lenovo representative. Dell doesn't offer a biometric reader but says 20% of its enterprise notebooks have a smart card option.

### Theft recovery

A stolen laptop may have sensitive data as well as data the user created since the last backup. A tracking service such as Absolute Software Corp.'s Computrace can allow remote retrieval of critical data and issue a command to erase the disk, assuming that the missing unit attaches to the Internet and the agent software can check in. Lenovo embeds the stealth Computrace client in the BIOS in its ThinkPad X series to unsure that the client software can't be removed.

### Encryption

Authentication schemes won't protect lapton data if the disk is removed from the system. Windows file encryption isn't sufficient, since the user log-on unencrypts the data. Other software-based disk-encryption products can be set to encrypt only specific folders, such as My Documents, or the entire disk (which can slow performance) if you'd rather not trust users to put all of their sensitive files in the right location.

Credant Technologies Inc. in Addison. Texas, offers a third option: Its Mobile Guardian can be set to encrypt specific file types, no matter where they're stored on the disk.

One potential weakness with softwarebased encryption is that the key may be stored on the disk. Other products can store the key in a laptop's TPM chip, which is more secure.

Encryption features could soon be integrated into the disk drive itself. Seagate Technology LLC plans to support hardwarebased disk encryption in its Momentus drives later this year. The drives could be in notebooks from major manufacturers next year. Dell and IBM have recently expressed interest in the product for their laptops.

-Robert L. Mitchell

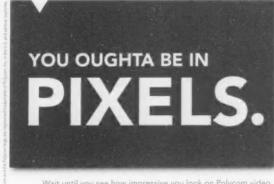
fice applications, says Cara Jiles, director of end-user experience at Cerner Corp. in Kansas City, Mo. "Even a lowend laptop is sufficient for most workers," she says. Two years ago, the health care automation technology vendor decided to move entirely to laptops. Now some 95% of Cerner's 6,200 employees use them.

Sink says the cost difference is still significant. He pays about \$800 for a typical desktop PC with a 3-GHz processor, IGB of RAM and a fast hard drive, excluding the monitor. A compa-

rable ThinkPad laptop costs about \$1,500. But the bottom-line difference isn't enough to dissuade him from buving laptops. "It's worth paying the premium for the mobility," he says.

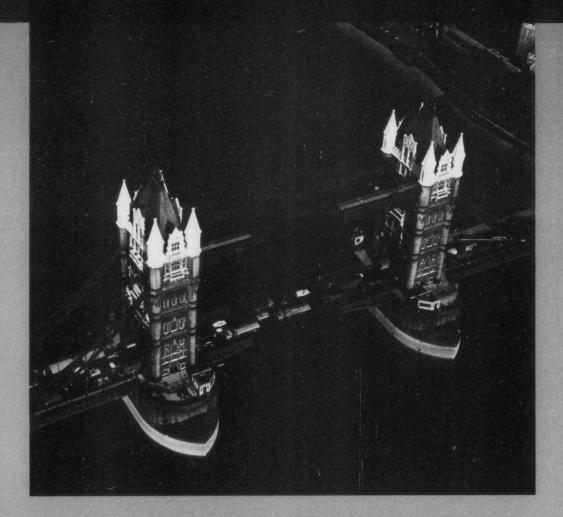
Meanwhile, new workstation-class laptops are starting to gain acceptance in areas such as software development and computer-aided design. At Alias, Dell Precision M60 mobile workstations offer both performance and mobility. The machines support up to 2GB of RAM, a 128MB graphics card and a

Continued on page 35



Wait until you see how impressive you look on Polycom video conferencing systems. They're intuitive, cost-effective, work with your infrastructure, and make you look like a star. To learn more, sit back and enjoy the show at polycom.com/experience





# YOUR JOB IS TO KEEP SYSTEMS AND APPLICATIONS RUNNING. OUR MISSION IS TO KEEP PEOPLE AND INFORMATION CONNECTED. LET'S WORK TOGETHER.

Continuous access to information no matter what. That's Information Availability. It's what your employees, suppliers and customers demand every minute of every day. But to deliver it flawlessly, you need a massive global infrastructure, redundant systems and diverse networks being monitored and supported by skilled technical experts at secure facilities. That's exactly what SunGard provides.

As a result, we can offer you a higher level of availability and save your company, on average, 25% versus building the infrastructure yourself. Plus, it's a vendor neutral solution that lets you control your data, applications and network while giving you the flexibility to adjust to the changing needs of your business. But best of all, it lets you spend more time solving business problems and less time solving technical problems.

For years, companies around the world have turned to SunGard to restore their systems when something went wrong. So, it's not surprising that they're now turning to us to mitigate risk and make sure they never go down in the first place.

You want your network and systems to always be up and running. We want the same thing. Let's get together. To learn more, visit www.availability.sungard.com or call 1-800-468-7483.

SUNGARD®

Keeping People and Information Connected.

"Potential savings based on IBC While Paper, Ensuring Information Availabilit Aligning Customer Needs with an Optimal Investment Strategy:

#### **36 WIRELESS AND HANDHELDS EXTEND PRODUCTIVITY**

#### THE BUILD-OUT OF WI-FI

wireless LANs across corporate campuses has stoked the demand for laptops. Now, emerging third-generation wireless services are extending the reach of laptops - and making handheld devices and smart phones a more effective alternative for some uses

High-speed wide-area wireless technologies such an Evolution-Data Optimized (EV-DO) have expanded the usefulness of laptops on the road while enabling smaller devices to take on more functions. Harvard Pilgrim Health Care is already experi-

menting. Its initial pilot involves. laptops equipped with both Wi-Fi and EV-DO cards from Verizon Wireless The units will access business applications via the company's Web portal. "We're beginning to move our applications, having them available for the sales force or medical management so that they're accessible in the field," says Jerry Polcari, director of IT.

Pelcari is considering expanding the technology for use with the staff's BlackBerry devices. "It's conceivable that we could put a lightweight application on a BlackBerry, but we're not ready

for that," Polcari says.

The law firm Sebaly Shillito ₫ Dyer has equipped its laptops with EV-DO cards and given its staff Treo 600 smart phones to check e-mail, calendars and to-do lists

"I do see [smart phones] replacing laptops to some degree. When I'm traveling, I don't have to bring the laptop as much." says Brian Clayton, manager of the information systems group.

That sentiment appears to be driving sales of handhelds. Research recently released by Gartner shows that sales increased to record levels this year. But can handheld devices really replace laptops?

Handhelds and smart phones are ultimately limited by their small screens. For example, documents attached to e-mails aren't easy to read. Clayton says. For most purposes, handhelds are likely to be used as an adjunct to a PC or laptop rather than as a replacement

PCs and laptops will remain the hub of the digital universe for most people, says Endpoint Technologies analyst Roger Kay. "You might be able to make do with a small constellation of devices. but that's a future evolution."

- Robert L. Mitchell

Continued from page 33

15.4-in., 1.600-by-1.400-pixel UXGA screen that offers a wide viewing angle. Hewlett-Packard Co. and Lenovo have similar offerings. While most developers at Alias are still using desktops. Melnyk expects that to change as the group moves more heavily into collaborative development.

At Cerner, programmers have already made the transition. "For developers, it wasn't the power that was important; it was the disk speed," says liles. The availability of 7.200-rom disk drives leveled the playing field, offering I/O comparable to that on desktops.

Designers at Kichler Lighting are taking advantage of the improved displays. "They can take [the laptops] home with them and view AutoCAD drawings," says Sink. The wide viewing angle of the screens is also helpful in meetings. "We have a lot of collaborative projects, and we have wireless throughout the building. People find it much easier to bring laptops with them," he says.

Today, about 35% of Kichler's computers are laptops, and Sink says that number is steadily increasing. For most users, the power is adequate, "For the applications we run, it's a small difference in performance," Sink says.

Alias doesn't see its developers running builds on laptops, however. "Currently, it's mainly an adjunct to the desktop," Melnyk says. In the future, he says, code will be checked out to developers for use on laptops and then checked back in for compiling on backend cluster servers.

Laptop reliability has also improved. Cases, hinges and keyboards are more

durable than they were in the past, vendors claim, while shock-resistant hard disk drives have made disk crashes less common. "The ability to knock them around a little bit more has improved," says Melnyk. His organization now keeps laptops for four to five years. "The units are just that good," he says.

#### **Limits of Mobility**

Despite the advantages, laptops don't fit everywhere and are unlikely to replace PCs entirely, IT professionals say. Administrative assistants, call center staffers and others who work from a fixed location and don't need to travel or telecommute are likely to remain on desktops.

Roger Kay, an analyst at Endpoint Technologies Associates Inc. in Wayland, Mass., says he thinks 30% of the typical organization's employees are probably "bedrock desktop" users who need extra power or don't need mobility. In some industries, such as financial services, security concerns may dictate against the use of laptops, which can be lost or stolen, Kay says.

Polcari says Harvard Pilgrim has reached the saturation point for laptops, barring a change in the way it does business. That might just be in the cards. He says his company has bandied about the idea of moving to a telecommuting model for more than 600 staffers who handle claims adjudication and customer service functions. No decision has been made, but, he adds, "if that changed, [laptop use] would be at 90% or 95%.

At Sebaly Shillito & Dyer LPA in Dayton, Ohio, lawyers and paralegals are already on laptops, and less-mobile legal assistants and secretaries will be soon, says Brian Clayton, manager of the information systems group. Laptops allow support staffers to easily move from office to office to provide vacation coverage or to help with a project, he says.

As laptop use grows, the security implications also become more prominent. "Companies that are aggressive with notebooks are stepping back a bit because of concerns over security issues," says Gartner's Kleynhans. Clayton says his firm is looking into new HP notebooks with encryption and biometric authentication technology. The HP security system stores password data in the BIOS for added security. "It doesn't even let the drive spin up until the code is entered," he says.

Managing laptops is another potential problem. "Notebooks pose a whole bunch of challenges for the IT group. It's more expensive to manage something that moves around," Kleynhans says. But Iiles says notebooks are also easier to issue because there are fewer components to install. At Cerner, she says, "we turn around 2,000 PCs every two years, so the less you have to handle, the easier it becomes,"

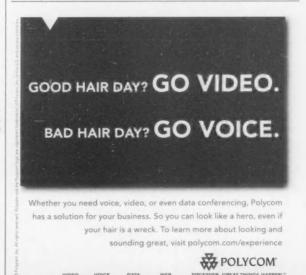
Regardless of the challenges, users agree that there's no going back. "Our culture would not be as strong as it is today if it were not for the mobility that laptops allow," says Jiles.

At Harvard Pilgrim, the presumption of mobility has changed how people go about doing their jobs. "Laptops have become part of the business landscape," Polcari says. "They are now a strategic platform." @ 56909

#### **INCREASED PRODUCTIVITY?**

Does the ability to work anywhere make employees more productive - or just work more hours?

QuickLink 56910 www.computerworld.com





#### MOST EMPLOYEES CAN'T EVEN SEE THEIR DESK MUCH LESS WORRY ABOUT ENSURING COMPLIANCE

Reduce compliance risk and email storage requirements with automated email management.

Email gives you 35 billion reasons every business day to find a better way to manage it. Email must meet the same rigorous compliance mandates as other corporate documents. Inadequate storage, human error, and inconsistent policy enforcement put you at risk. FileNet Email Manager with exclusive ZeroClick technology automates your entire email management lifecycle – minimizing human interaction, improving productivity and mitigating storage needs. It's much more than an archival solution. Together with FileNet Records Manager, email can now be fully managed without user interaction or costly infrastructure. The leading choice of global enterprises, you won't find a better email management solution anywhere. (We know your employees can't.)

Learn how to make better decisions, faster.

Download the Email Management white paper at www.filenet.com/emailwp



1-800-filenet

www.filenet.com

©2005 FileNet Corporation. All rights reserved.

# Geeks

#### A STROLL THROUGH THE TECHNOLOGY LANDSCAPE

#### **High-Performance Computing Takes** On High Gas Prices

RISING OIL PRICES have accelerated the push to develop more-efficient combustion systems. To achieve that goal, scientists need to know more about the complex chemical reactions involved in combustion processes.

In one of the largest simulations ever brought to bear on this problem, researchers at Pacific Northwest National Laboratory performed quantum chemical calculations to accurately predict the heat of formation of octane, a key component of gasoline.

The calculation - performed using 1,400 parallel processors - took only 23 hours to



complete and achieved a sustained efficiency of 75%, compared with the 5% to 10% efficiency of most simulation models. In comparison, the fastest one-processor desktop computer would have required three and a half years

and 2.5TB of memory to run the calculation. The calculations should lay the groundwork

#### GROVES OF ACADEMIA

#### **New Chip to Expand** Mobile Memory

Mobile phones could one day have the memory capacity of desktop computers, thanks to a microchip that mimics the functioning of the human brain, according to a group of scientists from three universities in the U.K.

Writing in the current issue of the journal Science, researchers from Imperial College London, Durham University and the University of Sheffield say their new computer chip design will enable large amounts of data to be stored in small volumes by using a complex interconnected network of nanowires, with computing functions and decisions performed at the nodes where they meet, similar to the way neurons and axons operate in the brain.

This latest research, however, has the

potential to develop a chip that combines the storage capability of a hard drive with the low cost of memory cards, potentially increasing memory capacity by 200 times, from an average of 500MB to about 100GB.

The technology is based on a discovery by Russeil Cowburn, professor of nanotechnology in Imperial's Department of Physics. He and his colleagues found that by using nanotechnology, it's possible to reproduce the key functions of semiconductor electronics in microchips using only the spin of electrons. which is responsible for magnetism, rather than the more conventional charge that traditional microchips use.

This has allowed them to construct a completely new architecture for electronics in three dimensions rather than the 2-D flat structure of conventional microchips.

for subsequent efforts to reliably predict the heat of formation of larger alkanes in diesel fuel, for which there is very little experimental data, and the heat of formation of key reactive intermediates, such as alkyl and alkoxy radicals, for which there is no experimental data.

Of course, the key question is whether this work will help push gas prices below \$3 a gallon. Q 56913

Page compiled by Tommy Peterson.

#### **DIFFERENCE ENGINES**

#### Magnetic Moments



In 1898, Danish engineer Valdemar Poulsen filed a patent for his telegraphone, the first invention that to record data.

in this case sound on a magnetized steel wire. A failed medical student who worked at Copenhagen Telephone Ca., Paulson put his invention to use as a telephone answering machine.

This same principle would later be used for magnetic tapes and subsequently magnetic drums and platters. some of which are now called hard disks, Later in his career, Poulson developed what most believe is the original version of the hard disk, a 4.5-in. steel disk with a raised spiral on its surface that was "read" by an electromagnet as the disk rotated.

In 1928, Berman engineer Fritz Pfleumer demonstrated a magnetic recorder he had designed using paper tape coated with steel dust. Although manufacturer AEG and the company that was to become BASF used Pfleumer's design to make their fortunes, his patent was later declared null and void. The German National Court ruled that Pfleumer's design had been covered by Poulson's earlie patent

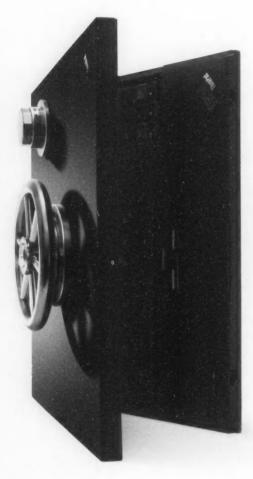


#### ANALOG PHONE SYSTEM?

HOW RETRO.

Now is the time to upgrade to VoIP handsets and conference phones from Polycom. Our award-winning VoIP solutions make the transition to the world of IP easier than ever. To learn more about the phones of the future, visit polycom.com/experience





LOSE THE WIRES.
AND, WHILE YOU'RE AT IT,
LOSE THE HACKERS.

Incutability. All offers subject to availability, Lenove maximum this right to alter product offerings and specifications at any time, without notice. Lenove is not responsible for photographic or typographic error. \*Pricing Prices do not include tax or shipping or meycling fees and one subject to change without notice. Branise prices may vary. \*Warranty- For a copy of applicable products or maximum, reported price and one subject to change without notice. Branise prices may vary. \*Warranty- For a copy of applicable products or maximum, reported price price prices products or maximum, reported price price price products or maximum, reported price price



#### BEST WIRELESS DATA PROTECTION, ONLY ON A THINKPAD.

Hackers, beware. ThinkPad® notebooks with Intel® Centrino™ Mobile Technology allow users to work wirelessly with greater freedom. And their work will be protected because select ThinkPad notebooks offer an extra layer of data protection - a vault-like combination of a built-in security chip, data encryption software and an Integrated Fingerprint Reader. And we're the only ones to offer wireless PCs with this level of security as a standard feature. So, users can be wireless. Without having to be defenseless.

#### ThinkPad R50e

DISTINCTIVE INNOVATIONS

ThinkVantage Rescue and Recovery one button recovery and restore solution

SYSTEM FEATURES

Intel® Centrino® Mobile Technology
Intel® Pentium® M Processor 725 (1.60GHz)<sup>1</sup> Intel® PRO/Wireless 2200BG (802.11b/g)

Microsoft® Windows® XP Professional3 15" XGA TFT Display (1024x768) 256MB DDR SDRAM®, 40GB Hard Drive®

\$949\* (P/N 1842QDU)

ThinkPad Premiere Leather Carrying Case

\$99 (P/N 10K0209)

ThinkPad Women's Executive Red Leather Tote

\$130 (P/N 22P8858)

#### ThinkPad T43 with Integrated Fingerprint Reader

Perfect balance of performance and portability.

#### DISTINCTIVE INNOVATIONS

ThinkVantage Client Security Solution 6.0%-Strong security as a standard feature

#### SYSTEM FEATURES

Intel® Centrino® Mobile Technology Intel® Pentium® M Processor 740 (1.73GHz) Intel® PRO/Wireless 2200BG (802.11b/g)2 Microsoft\* Windows\* XP Professional 15" XGA TFT Display (1024x768) 64MB ATI Mobility RADEON x300 Graphics 512MB DDR2 SDRAM, 60GB Hard Drive Ultrabay Slim CD-RW/DVD ROM Combo Only 1st thin and 4.7-lb travel weights

1-yr limited warranty THINK EXPRESS MODEL

\$1599 (P/N 2686DHU)

With the Think Express Program, ThinkPad notebooks are preconfigured with your business, and your budget, in mind.

To shop or locate your local reseller

Call 1 866-426-0009 Go to thinkpad.com/security/m583

ThinkPad is a product of Lenovo.

ThinkPad

In subject to additional charges. (12) Systems with limited unsule service: unr designed to be repaired dissing the applicable warranty period primarily with customer-replaceable parts. A technician will only be unit orsafe to perform a requir of (a) remote belighouse diagnosis and/or customer paraples are unusual to accobe the problem, or (b) the part is one of time fee designated by Lenovo for contine explacement. For a list of onsists implicability and contine contine contine explacement are unusual to a search position and contine explacement. However, the fellowing are trademants or discontined. However, the fellowing in t

# SUPERCOMPUTER ON A CHIP

NEW MICROPROCESSOR ARCHITECTURE PROMISES A TRILLION OPERATIONS IN ONE SECOND BY 2012. BY GARY H. ANTHES

OMPUTER scientists at the University of Texas at Austin are inventing a radical microprocessor architecture, one that aims to solve some of the most vexing problems facing chip designers today. If successful, the Defense Department-funded effort could lead to processors of unprecedented performance and flexibility.

The density of transistors on a chip has doubled at least every two years for decades,

and microprocessor designers have put those transistors to good use. Advanced circuits use techniques such as program branch prediction and speculative execution in order to build deep instruction "pipelines" that increase the throughput of the processor by allowing it to execute multiple instructions simultane-

ously. But the growing complexity of such circuits, and the heat they produce, signal an end to that approach. Rather than trying to build faster processor cores, chip builders are beginning to put more of them on a chip.

The problem with that, says Doug Burger, a computer science professor at the University of Texas, is that for application software to take advantage of those multiple cores, programmers must structure their code for parallel processing, and that's difficult or impossible for some applica-

tions. "The industry is running into a programmability wall, passing the buck to software and hoping

the programmer will be able to write codes for their systems," he says.

Burger and his colleagues hope to solve these problems with a new microprocessor and instruction set architecture called Trips, or the Teraop Reliable Intelligently Adaptive Processing System. "Our goal is to exploit concurrency, whether it's given to you by the programmer or not," he says.

Trips uses several techniques to do just that. First, the Trips compiler sends executable code to the hardware in blocks of up to 128 instructions. The processor "sees" and executes a block all at once, as if it were a single instruction, greatly decreasing the overhead associated with instruction handling and scheduling.

Second, instructions inside a block execute in a "data flow" fashion, meaning that each instruction executes as soon as its inputs arrive, rather than in some sequence imposed by the compiler or the programmer. "As such, the data is flowing through the instructions," explains Steve Keckler, a computer science professor and a Trips project co-leader with Burger.

**Increasing Efficiency** 

Another trick: Within a block. the Trips compiler can merge two instructions that are on different paths into a single instruction if they have the same target and operation. Compared with earlier designs based on data flow concepts, "our aggressive data-flow model gives the compiler the opportunity to produce much tighter and more efficient code," says professor Kathrvn McKinley, who heads the compiler portion of the Trips project.

Finally, data flow execution is enabled by "direct target encoding," by which the results from one instruction go directly to the next consuming instruction without being temporarily stored in a centralized register file. That further reduces processing overhead and speeds computation.

And compared with traditional methods for improving performance — increasing processor clock speeds and building deeper pipelines the performance improvements enabled by these techniques come at a modest increase in power consumption.

The challenge of dealing with power consumption is forcing chip builders to move to multicore chips. Former Intel Corp. engineer Mark McDermott, now engineering vice president at Coherent Logix Inc. in Austin, says,



"You look at something like Pentium, and there's a huge amount of control logic, control transistors that don't do any work — they just consume power. Trips is trying to push some of that complexity back up into the compiler.

"Where Trips will really shine is in very, very highperformance data flow embedded computing, like softwaredefined radio," he says.

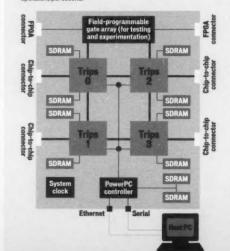
But, McDermott adds, "I

don't know if it's a silver bullet yet. There's still a fair amount of research to be done."

According to its developers, Trips' data flow techniques work quite well with the three kinds of concurrency found in software — instruction-level, thread-level and data-level parallelism. For that reason, Trips is said to be "polymorphous," meaning that it can perform well on widely differing types of applications — scientific.

#### THE TRIPS BOARD

The Trips board, to be available in March, will be used for exploring parallel-processing scenarios, including streaming applications such as signal processing. Each of four 130nm Trips chips has two sets of 16 concurrent instruction-level processor cores, IMB of on-chip RAM, 26B of attached SDRAM and a 533-MHz clock, for a peak of 16 billion parations per second.



commercial and embedded.

And that's exactly the quality sought by the Defense Advanced Research Projects Agency in its Polymorphous Computing Architectures proiect. DARPA, which is contributing \$15.4 million to Trips, is looking for a chip that is able to scale to 1 trillion sustained operations (tera-op) per second on many applications.

The university is about to deliver its Trips design to IBM, which will fabricate prototype chips and return them in February. The chips will have two processor cores, each able to execute 16 instructions simultaneously. Running at 500 MHz, the chips will perform 16 billion operations per second, Keckler says. The university will look to industry to commercialize the technology and

meet DARPA's goal of offering 10-GHz chips capable of 1 teraop by 2012, he says.

'We have an active interest in commercializing the technology, and we are looking for commercial partners," Burger says. Widespread commercial availability is what DARPA is hoping for as well. That plus polymorphism would mean the Pentagon could buy cheap, off-the-shelf chips for a fraction of what it now pays for exotic, custom-made processors for individual systems.

Chuck Moore, a senior fellow at Advanced Micro Devices Inc., says Trips offers a lot of promise. "The concepts are well aligned with the way code really behaves," he says. "The polymorphous aspects of Trips can enable it to do well on a wide variety of workloads"

One of the big challenges to becoming a mainstream commercial processor is compatibility with existing software and systems, especially x86 compatibility, Moore says. But one way to maintain compatibility would be to use Trips as a co-processor, he says. "The general-purpose [x86] processor could offload heavy tasks onto the co-processor while still handling legacy compati-bility on its own."

Despite the promise of the Trips technology, Moore cautions, "on a marketing level, it is tricky to introduce radically new things. It seems like it will need to start in a specific niche and demonstrate the advantages there. Once it has been proven to be useful in some key market, it is more likely it can spread more broadly." O 56914

of the Trips man is in hardware. The rest is in software

It's in the Trips compiler for Fortran and C. to be exact. It employs a number of innovative techniques aimed at boosting microprocessor performance without putting added burdens on the programmer. "We believe that Trips provides a sweet spot, with the appropriate division of responsibilities between the compiler and hardware," says professor Kathryn McKinley. compiler lead on the project.

Previous data-flow architec tures, such as those developed at MIT in the 1970s and '80s, required special programming lanpuages to simplify the compiler But Trips limits data flow to a

fixed-size instruction block . . . [and that] simplifies the compiler's job considerably compared to previous data flow architec-tures," Mckinley says.

But, she adds, "we aren't done yet. We have not yet turned classic optimizations such as unrolling and in-lining, and there are a number of compiler heuristics and policies that need tuning in vivo rather than in simulation, especially for large programs.

And the compiler will ultimately have to be rewritten. "It is written for robustness and ease of research experimentation rather than for speed of compilation," McKinley says. "A next-generation Trips compiler is probably

- Gary H. Anthe:

Well that's done. Happiness is a dependable Ricoh color printer.





Ricoh dependability moves your ideas forward.

RICOH

# Compliance Focus Leads to Experiment in Cheap Films

If you want employees to retain the information you give them in training, you'd better make the material interesting. By C.J. Kelly

HE STATE AGENCY I
work for is categorized
as a "covered entity" under the Health Insurance Portability and Accountability Act. That means that
we handle and transmit health
information on state residents
that is subject to the HIPAA
privacy and security rulings.

To comply with those rules, we have to make sure that all of our employees know the

proper way to handle the protected information they have access to — anything from personal health information such as HIV test results to Social Security num-

bers, home addresses and health care provider information. Training is given to all new employees, and privacy information is provided via the agency's internal Web site.

Staffers are instructed not to leave confidential information lying around on desks and to lock their computer screens when away from their desks. The training materials are overseen by the agency's privacy officer, and his organization has written and published a document of over 100 pages. Each unit chief (agencyspeak for "department manager") has his employees read the document and then sends an e-mail to the privacy organization listing the names of those who have done so.

Yuck! Would you read 100 pages on HIPAA compliance? I might read a document of that size if it were really interesting and pertained specifically to my profession, but I doubt that I could get through five pages on HIPAA compliance. As much as I didn't want

to revisit the topic of HIPAA training, I knew that in order to have an effective training program, things had to change,

Why does this concern the security manager? I have been asked to approve policies and procedures issued by the privacy organization before publication, since they're an important intersection between privacy and security. I requested a meeting with the

privacy officer so that we might collaborate on future training and publication endeavors.

My thinking is that if it's important for employees to

learn how to comply with the privacy and security rulings, then we have to make the presentation something they'll want to spend time on.

In other words, I don't want to use the typical approach of posting static information on an internal Web site and telling employees to visit the intranet to read and become informed. Web pages filled with do's and don'ts are never going to hold the interest of busy workers, even if you use PowerPoint presentations to add a little color and some pictures.

What we need is an approach that will capture employees' attention, drive home for them how critical it is to

Yuck! Would you read 100 pages on HIPAA compliance? protect the personal and private health information of our state's residents, and show them how to do that. And this effective, entertaining and sustaining program should cost less than 10% of the information security budget (a Gartner recommendation).

An Idea, but No Money

I had an idea, but as usual, we don't have the funds or staff to pursue it the way we could if we were in the private sector. Not that that would ever stop me. I sought my boss's approval to experiment, partly on my own time and dime, to see if I could find a way to bring compliance awareness to life for our agency with an on-demand, Web-based program featuring video and audio clips, each running three to five minutes.

These movies would show employees being confronted with either privacy or security issues as they go about their normal duties. Each clip would cover a different topic: privacy concerns for clinicians students workers and researchers, plus security basics, such as how to protect vour password, your computer and your data. The minimovies would present a scenario, demonstrate the danger of noncompliance and then go back to show how to fully comply.

With a real budget for this sort of thing, we could just buy the videos. By making them ourselves, though, we would save money, have materials very specific to our needs and, as an added bonus, be able to use our own agency employees as actors. It would be a bit like the Home & Garden Television series Design on a Dime, except we'll be making movies on a dime.

The first step is to develop a list of topics with the privacy

organization. The second step will be to determine for each topic what the bottom-line message is that we want employees to come away with and remember throughout their time at the agency. Then will come the creative work. The streaming media technology is already in place -Microsoft's 2003 Enterprise Server. We just have to find a way to make digital movie clips that can be edited and allow for insertion of privacy and security content.

The other night, as I dragged myself through the door, my daughter pulled on my arm and begged me to watch a video she had made. I plopped down on the couch as she popped a CD into the player. A splash screen accompanied by jazzy music appeared on the TV screen. She had shot video clips of her dance team with her digital camera, uploaded those to her computer and incorporated other video and audio, static content and still photos to make an impressive homemade movie. I asked her how she had done it.

"Mom, don't you remember that software you bought me a while back? It's called Sony Vegas Movie Studio. I can combine all kinds of media and make my own movies now. I love it, and I want to go into graphic design as a profession."

There, right in front of me, was the talent and the tools to pull together the awareness program. I wonder if she'll want me to pay her? b

#### WHAT DO YOU THINK?

This week's journal is written by a real security manager, "C.J. Kelly," whose name and employer have been disguised for obvious reasons. Contact her at mackjelly@yaho.com, or join the discussion in our forum: QuickLink a1590.

To find a complete archive of our Security Managets. Journals, go online to

Security Manager's Journals, go online to computerworld.com/secjournal.

#### **SECURITY LOG**

#### New Take on Antivirus Software

By year's end, Sana Security Inc. plans to ship a new version of its Primary Response antivirus software that will be able to identify and remove malicious software without the "signature" code used by most antivirus vendors. The software, which will probably be called Primary Response 4.0, will also be the first ver sion of the Sana product that users can run in a stand-alone fashion without the company's server-side management soft-ware, said San Mateo, Calif.based Sana. The stand-alone version will cost about \$40.

#### Barracuda to Unveil IM Firewall

Antispam firewall appliance vendor Barracuda Networks Inc. plans to debut a line of appliances early next year to help corporations safeguard their IM users. The new devices, which the Mountain View, Calif.-based company claims will allow busine to protect and archive the content of popular IM systems, will be available in five models for up to 7,000 users each. The Barracuda IM Fire-wall devices, which will provide tools to secure, monitor and manage all internal and external IM communications, will be priced from \$1,999 to \$27,999 and will begin shipping in the first quarter of 2006.

#### **Fast ID Validation**

Infonex inc. introduced IDNex, a platform-independent identity verification and validation tool that verifies critical customer information, including address, Social Security number and criver's license number, with analysis that can be done in seconds. IDNex uses application programming interfaces that enable users to integrate the tool through XML or HTML, and it operates over TCP/IP or as a standalone application.

#### **BRIEFS**

#### **New Tools Coming** For Agile Developers

■ Rally Software Development Corp. last week unveiled features that it plans to add to Raily Release 5.5 of its life-cycle management tools for agile developers. The release will include new views and advanced filters for defect management and the ability to view reports detailing the completeness of features. The product will also include cross-project reporting to provide visibility into the status of all projects and new reporting views for managing development teams. A new plug-in designed to allow users to view and update tasks within the Eclipse Integrated **Development Environment will also** be included in 5.5, according to officials at Boulder, Colo.-based Rally. The release is scheduled to be available in two phases, with the defect customization features available Oct. 1 and the crossreporting and team management features available on Nov. 1. The Eclipse plug-in is already available.

#### **SOA Management Tool Gets Upgrade**

■ Infravio Inc. last week announced a new version of its flagship product for managing and governing the core components of a service-oriented architecture. The Cupertino, Calif.-based company unveiled Infravio X-Registry Platform 5, which will let users catalog, publish, promote, find and download services so they can be easily added to new applications and reused later.

In the registry, users can also

apply policies to workflow and apply role-based security requirements. The product also includes a repository to store and perform version control of service attributes and data schemas. In the repository, users can apply security and requirements for servicelevel agreements through "delivery contracts," which can be enterprisewide or limited to a single user. Finally, the product will let users drive access control, authorization, authentication and security from a single business view. X-Registry Platform 5 is available now. Prices range from \$10,000 to \$150,000.

#### **HP. Dell Plan Access** To Verizon Data Net

■ Hewlett-Packard Co. and Dell Inc. plan early next year to start selling laptops with embedded radios that let users access the Internet via Verizon Wireless' data network, the two U.S. manufacturers said last week in separate statements. In the meantime, Dell has begun selling an external PC card that lets users access Verizon's **EVDO (Evolution Data Optimized)** network. HP plans to offer a similar card in the coming weeks.

#### **IMLogic Aims to** Secure IM Networks

■ Waltham, Mass.-based IMlogic Inc. has introduced a plug-and-play instant messaging appliance that it says helps enterprise customers secure their IM networks against attacks. The IMlogic IM Manager SmartGig 6000 is preconfigured with IMlogic's IM Manager tool and is integrated with the company's recently announced IMlogic Real-Time Threat Protection System.

IM Manager SG6000 manages, secures and logs all IM traffic with certified support for public IM networks, including those of America Online Inc., MSN and Yahoo Inc. Pricing for the appliance starts at \$10,0000, with volume licensing for individual users.

#### **Mobile Antivirus** Software Released

■ F-Secure Corp. and SmartTrust AB are teaming up to deliver antivirus software to mobile devices F-Secure's antivirus software will be incorporated into SmartManage Protect, a mobile security system from SmartTrust that lets mobile operators manage antivirus software on subscriber handsets over the air. If mobile operators detect a vulnerability, antivirus software from F-Secure can be delivered. according to the companies.

Well that's done. Happiness is a dependable Ricoh color printer.



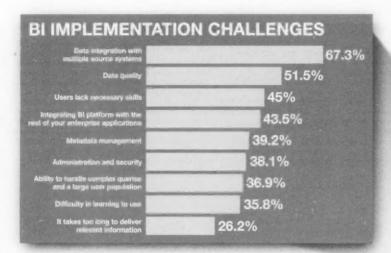


Ricoh dependability moves your ideas forward.

RICOH

# WHAT ARE YOUR PEERS SAYING ABOUT BUSINESS INTELLIGENCE?

Find out in this new report from SAS and Computerworld Research that presents results from a recent survey of 268 IT influencers.



White Paper

To access the full report now, go to:

www.computerworld.com/survey/sas

COMPUTERWORLD

Sas.

Trends in Business Intelligence Purchasing and Implementation Research conducted by: COMPUTERVISION

SAS SOFTWARE FOR BUSINESS INTELLIGENCE AND BEYOND

# SAS BUSINESS INTELLIGENCE

The Power to Know why other BI vendors have arrived too late.

#### WANT PROOF?

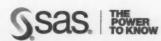
Hear from industry experts, analysts and customers about proven successes with SAS Business Intelligence.

BetterManagement LIVE Worldwide Business Conference Las Vegas, NV, USA October 26-27, 2005 While other vendors are playing catch-up — by just now introducing their BI approaches — SAS continues to lead the way in the business intelligence market. When you consider investing in or upgrading your current BI software, talk to SAS about our proven successes.

- Unmatched Enterprise Intelligence Platform
- Nearly 30 years of BI experience
- Undisputed leader in business analytics
- More than 4 million users at over 40,000 locations worldwide
- a At work in 94% of FORTUNE Global 500° companies

go Beyond Bl at www.sas.com/sasBl . Analyst case study

SAS'9



#### **BRIEFS**

#### Kace Launches LAN Appliance

■ Kace Networks Inc. has announced Kbox IT Management Suite 2.0, an appliance designed to help midsize companies manage LAN nodes. It supports remote installation and distribution of applications, enables remote desktop integration for help desk support and provides reports on socurity vulnerabilities, according to Mountain View, Calif. -based Kace. Pricing starts at \$7,500 for a 100-node network.

#### Ardence Delivery Supports Linux

■ Ardence Inc., which uses streaming technology to deliver applications to desktops for use as thin clients, will offer Linux support with Ardence 3.5, which was released last week. The Waltham, Mass.-based company also supports Windows environments.

#### Virsa Upgrades Compliance App

■ Virsa Systems Inc. announced a new version of its Virsa Continuous Compliance Suite for Oracle The software assesses the risk of all proposed user-authorization changes to the Oracle E-Business suite before they are committed to the production system, said Fremont, Calif.-based Virsa, It's designed to prevent unauthorized access to Oracle software and provides exception-based alerts and an audit trail of system use. The suite will ship this fall, with average customer prices ranging from \$300,000 to \$500,000.

#### NextPage Offers Document Service

■ NextPage Inc. in Draper, Utah, has launched NextPage 2, a subscription-based document management service. It eliminates the need for a centralized repository, said the company. NextPage 2 starts at \$99 per user annually and can be used on Microsoft Word, PowerPoint and Excel files. ROBERT L. MITCHELL

# Rise of the Virtual PC

'M USING MICROSOFT WORD to write this column. But the version of Word executing on my laptop today isn't really installed on my machine: It was streamed to me by Softricity Inc.'s Soft-Grid Server in Boston. What's more, I'm running only a partial instance of the program. I don't have a full copy loaded.

I don't need it.

Application virtualization software products, available from vendors such as Softricity and App-Stream Inc., take advantage of that fact. These tools assemble the core parts of Word that I need to get up and running and stream it to a cache on my local hard drive.

On my machine, that initial download process was completed in about five minutes over a broadband link. By then, I had enough of the program — about 10% — to run Word and write this column. The rest of the program resides on a server, which stands ready to deliver other pieces if I need them.

Once in cache, the virtual Word program loads and runs about as fast as my locally installed copy. Access is transparent: As a user, I can run it by clicking on a Word desktop icon or by selecting Word from the Start menu.

If nothing else, this experiment lends credence to the idea that most people don't require 90% of what's in most desktop applications today. But it also shows how IT can overcome configuration and manageability challenges in innovative ways. Technology is blurring the lines between applications and data, between local and remote execution, between client and server.

On the PC, application virtualization attacks the issue of configuration management. It also addresses the problem of Windows entropy — the gradual degradation of the operating



system over time as a result of the repeated installation and removal of programs.

Desktop support groups spend hundreds of hours building customized installation files and doing regression testing to ensure that all of the registry entries and other changes made by each application don't step on one another. Application virtualiza-

tion tools sidestep that by trapping every setting that the application's installer wants to modify and placing it in a virtual environment, along with an image of the application in the desired state. The workstation can then pull the resulting files into a local cache and run the program as a virtual application.

Does the application live on the desktop or the server? To the user, it doesn't matter. To IT, applications become files that are centrally stored, managed and pushed out to local caches as needed. Applications become just another data type.

To conserve network bandwidth, SoftGrid uses compression and some protocol optimization techniques. For updates, only changed data blocks are sent to the local machine's cache.

Those same techniques are increasingly used to virtualize another data type: shared files.

Wide-area file-services appliances, such as iShare from Tacit Networks Inc., act as virtual file servers that cache data at branch offices while the live data remains in the data center, where it can be more effectively managed. With virtualization, neither programs nor data need to live locally. They just look and act like they do.

The line between remote and local execution of programs is also fading. For example, Softricity's ZeroTouch feature enables remote access to the user's desktop applications via a browser. But when the user clicks on the Word icon, the application may run locally from the cache, or the request may be redirected to execute on a Terminal Services or Citrix Systems server.

Am I running Word locally or via a virtual user-interface session in Terminal Services? The decision is made automatically for me, based on policies keyed to variables such as my location or available bandwidth.

With virtualization, users can access their own applications with their unique configuration settings, regardless of whether they're at work or on the road or whether they're accessing those applications from their own laptops, from a kiosk or from a colleague's computer. Virtualization means that users and their application environments are no longer machine-specific, and conversely, the machines themselves are no longer user-specific.

Eventually, personal computing could become abstracted from the PC itself. A new generation of Universal Serial Bus smart drives, when integrated with U3 LLC's software, will let users launch some simple applications directly from a virtual desktop on a flash disk. The day is coming when you'll be able to plug a smart drive into any available computer, boot from your personal USB device and start working with your applications. PC hardware will become an impersonal appliance, serving a virtual PC that fits into your pocket. © 56928

#### **CONNECT THE DOTS**

For more on virtual PCs, read Rob Mitchell's blog: www.computerworld.com/blogs/mitchell

HP PROUANT ML310 G2 SERVER



\$1,069







HP STORAGEWORKS DAT 40 USB INTERNAL TAPE DRIVE

\$599

 Easily connects to the ML310 internal -USB port-

No more SCSI interface costs or complication
 Same performance, capacity and reliability at
 To SES.

- Includes HP's exclusive One-Button Disa

# SUDDENLY YOU CAN APPRECIATE MICROMANAGERS.

Finally a micromanager you want around: the powerful and reliable HP ProLiant ML310 G2 server. Loaded with HP-developed manageability features and powered by the Intel® Pentium® 4 Processor, the ML310 is designed to minimize maintenance and maximize productivity. Just pop in the SmartStart CD to walk you through installation and get your system up and running. HP Systems Insight Manager will monitor your system and alert you to potential problems before they arise. Then leave it be—the optional remote management® tools let you keep track of your server no matter where you are. And, for a fast, easy backup solution, bundle it with the all-new HP StorageWorks DAT 40 USB internal tape drive. Just another reliable solution from the HP Smart Office Portfolio.

SMART ADVICE > SMART TECHNOLOGY > SMART SUPPORT

Three-year Care Pack
Add three years, next-business-day on-site support for \$199

Visit our Web site to download a free guide: Getting Started with HP Systems Insight Manager. Call 1-888-291-0364
Click hp.com/go/ML330mag2
Contact your local reseller





Prices shown are HP Direct prices, reselver and retail prices may vary. Prices shown are subject to change and do not include applicable state and incut taxes or shipping to recipient's address. Offices cannot be combined with any other offer or discount, are good while supplies test and are available from HP Direct and participating HP reselver, and included an available in the price of configure to over equivalent 65 x 257 x 2500 institution space or 2000. Contain waterupt resilication and we discolors and in sections are using apply for complete waterupt ordings, or 1000-355 x 1510 x 1511 x 151

TIME WARNER CABLE

#### The Point of Business



The point of business is cost-effectively connecting enterprise resources to better serve your customers. With a wholly owned, end-to-end network—backed by a team of consultants working with you to develop the optimal solution for your environment—Time Warner Cable delivers reliable business communications. Add to that, standard and customized SLAs, along with a full suite of data, video, and security solutions—including Metro Ethernet, Teleworker Solutions, Branch Office Connectivity—and you have a scalable infrastructure for sharing information, reducing costs and realizing the value on your IT investment. That's the point of business.



www.rrbiz.com 1-866-689-3678



Business Class

Experience Broadband

Highest Costomer Satisfaction With Business Broadband Data Service Freeiders

J.D. Power and Associates 2005 Major Provide: Susiness Telecommunications Services Study and Broadband Data segment includes services such as DSL, cable modern, ISDN, 1-1, ethernet and videoconferencing services. Study conducted among 5,179 businesses with 2-500+ employees that subscribe to major providers in the broadband business telecommunications masket, www.idpower.c

# MANAGEMENT

#### **Meeting of Minds**

The ability to run a good virtual meeting is an increasingly important skill in the global marketplace. But it takes more than technology. **Page 52** 



#### Managers' Forum

Paul Gen discusses the right and wrong reasons to switch to the management track, and he offers one reader an approach to a particularly delicate management challenge. Page 56

#### OPINION IT Cheat Sheet for CEOs

Your new CEO may not even know what he doesn't know. Paul M. Ingevaldson suggests that first you give him the questions. Then use the answers to jump-start your relationship. Page 58



NE THING that's certain about the city of Richmond, Calif.'s SAP software implementation: Like many other public-sector software projects, it provokes controversy.

In 2000, the city spent \$4.5 million to procure SAP AG's R/3 human resources, financial, payroll and plant maintenance applications, with an eye toward retiring outdated systems and improving services.

The cost is paltry compared with the scores of millions of dollars that large corporations shell out regularly in their ERP rollouts. But the price was significant for Richmond —  $\mathfrak a$  cash-strapped city of 100,000 that soon after the implementation was hit with a budget deficit of \$35 million.

City councilor Tom Butt and other critics charge that the system's capabilities were misrepresented and that it never should have been sold into a municipal environment. As evidence, they point out that during budget preparations last year, the finance department ended up putting in significant extra hours manually crunching the numbers rather than using R/3.

"The entire budget was done using Excel spreadsheets, with no interconnections among departments," Butt says. "SAP is a high-powered system used by many Fortune 500 companies. Richmond bought a corporate version of it and was the guinea pig for municipal use."

Butt was so peeved that he even attempted (unsuccessfully) to get the city council to pursue litigation against the integrator involved in the project.

#### **Opposing View**

But there's another side to the story. Richmond IT Director Sue Hartman says that while the R/3 installation is an easy scapegoat, the problems were really the result of the city's massive layoffs, budget cutbacks and pay cuts.

Between 2003 and 2004, 400 people were laid off, including some of the SAP-savvy finance employees and specially trained people who would have enabled the system to function as planned. As for the manual budget crunching, that was needed because a certain R/3 function was never implemented when priorities changed, she says.

Steve Peck, SAP's president of public-sector services, says that the company was candid with the city during the selection process and that the applications were chosen only after a formal evaluation that included other major vendors.

Richmond isn't alone. Over the past year, about a half-dozen highly visible, large-scale software instal-



# Why do so many public IT projects seem to go wrong? By Marc L. Songini

lations in the public sector have been scrapped, delayed or subjected to close scrutiny over perceived shortcomings.

Among them are the FBI's four-year, \$170 million Virtual Case File software project (scrapped); the SAP rollouts of the cities of San Antonio and Tacoma, Wash. (working but subject to intense user criticism); and the \$800 million-plus telephony and case

management system developed by Electronic Data Systems Corp. for the Child Support Agency of the U.K.'s Department of Work and Pensions (criticized for overruns in time and budget).

When it comes to troubled IT projects, it seems that the public sector is over-represented. But some observers say it's just that users there have a more public forum in which to air their dissatisfaction

#### Software created for the business/private sector will have a difficult time working in the public sector due to differences in how business is transacted.

MARK RENNER COURT ADMINISTRATOR MARION COUNTY IND

than users in the private sector.

In addition, says analyst Josh Greenbaum at Enterprise Applications Consulting in Berkeley, Calif., governments are subject to transparency laws that affect corporations only when CEOs deliver quarterly earnings reports.

The Freedom of Information Act is one of the key factors in all this," he says. "It shines a very. very bright spotlight on an all-too-common set of problems that plague not just the public sector" but also large projects in general.

But it's also true that the public sector is still a new market for software vendors. There are some common themes that run through the troubled rollouts:

- Less tech-savvy users.
- Inexperienced contract negotiators.
- Fewer resources to apply to the implementation.
- Claims that vendors oversold their systems' capabilities to inexperienced municipal leaders or force-fit them into suboptimal environments.

#### Mars and Venus

The public sector differs in other ways that can make an ERP implementation an uphill battle. Terry Kline has worked in both environments. As ERP project manager for Cumberland County, Pa., he worked on a successful implementation of a human resources, payroll and financial applications system from Lawson Software Inc.

In the private sector, Kline says, he could immediately escalate a problem during a rollout to a single executive and have it resolved. In his work for the county, however, he found himself dealing with a range of department heads. And because of limited resources, Kline says, he was limited to a project team about 30% smaller than he would use for a similar project in the private sector.

Moreover, according to implementers, commercial applications can be a poor fit for town, city and state

"Software created for the business/private sector will have a difficult time working in the public sector due to differences in how business is transacted." says Mark Renner, court administrator for Marion County, Ind., and a member of an Indiana Supreme Court Judicial Technology and Automation Committee board that's overseeing a troubled project.

The county has been participating in a \$92 million statewide court case management automation project that's facing a multiyear delay because of userfriendliness and performance problems.

One difficulty that Renner cites is that the financials application chosen - SSA Global Technologies Inc.'s Masterpiece - was more suited to accounting

professionals in a large company than to clerks processing criminal fines.

"I think there were assumptions that since Masterpiece was used by corporate America, it would work for government," Renner says. "It was not until we started working with the application that we realized the differences in how the court clerk did business and how private industry did business.

The lesson: "The public sector many times lacks experience because we do not have the occasion to negotiate large and complicated technology contracts," Renner says. "The public sector must hire the expertise to negotiate with the private sector on equal footing."

#### Infighting

Differing priorities among IT-savvy implementers and the tech-challenged users and elected officials they serve can further challenge public-sector part-

In Tacoma, a rapid \$50 million installation of SAPbased ERP and CRM software has proved to be a bone of contention between the city government and the department heads responsible for its rollout and operation. "Anytime you get elected officials involved in something this complex, you're in trouble," says city councilor Julie Anderson.

The system, which is roughly 2 years old, was meant to integrate and modernize the city's delivery of services. Because of the rapid implementation, however, some city workers complained about usability issues and payroll payment problems, and Tacoma had to spend an additional \$270,000 to

Amid user complaints, Anderson called for a public study to respond to doubts over the system's value and analyze the way the contract was negotiated. "Clearly, this project could have been simpler," she says, especially if it had been phased in over time and if the contract had stipulated that payment would require proof of the system's functional benefits, not simply its going live.

In defense of the system, David Otto, director of business information systems for Tacoma, says the issues have more to do with the intense change management that was required than with the system's functionality. The same resistance to change would be present in a private-sector rollout, he says, but it would be less publicized.

By its nature, the public sector seldom gets to fail quietly, so it may get more bad publicity than it deserves. But it clearly needs to improve its skills at choosing, negotiating and managing massive IT projects. Whether it hires the required skills or develops them the hard way, the sooner it does so, the sooner stories publicizing public-sector IT projects as boondoggles will disappear from the front pages of local newspapers. © 56669

#### Cheer Up

NOT EVERY SYSTEMS INSTALLATION in the public sector hits major bumps. The Customer Service Request (CSR) system from Motorola Inc. that was installed in 2001 for the city of Baltimore by the mandate of Mayor Martin O'Malley appears to have been a winner. The system processes nonemergency citizen service requests such as pothole fixes and ensures that there's an accountability trail to quarantee results.

The CSR system has accomplished "a transformation

from patronage politics to performance politics," says Baltimore CIO Elliot Schlanger.

Among the results: a 98% rate of completing service requests and an 80% rate of meeting or beating delivery targets, as well as a reduction in overtime and the elimination of nonproductive programs. In addition, by consolidating 125 to 150 decentralized call-takers into 60 centralized professional customer service agents, the city saved enough money to cover the recurring technology

- Marc L. Songini

What separates winning public-sector projects from also-rans? ERP veterans and analysts say these factors can make the crucial difference:

- Don't be oversold. Make sure the software fits your organization's needs.
- If you lack software contract negotiation experience, get help.
- Have an executive sponsor who will rally the troops and cut through red tape.
- Obtain buy-in at all levels of the organization to avoid infighting during implementation.
- Don't skimp on implementation. Apply enough people and resources to do it right.
- Map out the business processes that will be affected, and plan for appropriate change management.
- Implement in phases.
- Make sure users are properly trained.



HACKERS, VIRUSES, AND WORMS



ARE MET WITH SWIFT AND DECISIVE ACTION

MICROSOFT.COM/SECURITY/IT

Microsoft

# Meeting

Running a good virtual meeting takes more than technology. **By Mary K. Pratt** 

onald berman had a dilemma: He supervised managers all over the country but found traveling for group meetings to be an expensive inconvenience. "The travel was killing me, and I thought there must be a better way to meet," he says.

So about five years ago, he tried using phone lines and a shared electronic whiteboard to connect 10 people as they hammered out a compensation spreadsheet.

Berman found that a process that used to take hours of discussion in person was whittled down to one hour — without the time and expense of traveling

He says the shared application helped everyone focus on the task at hand in a way that doesn't always happen in a conference room. And "everyone sees what's being done, so you build trust up rapidly," he says.

"Like e-mail, it changed the communication path," says Berman, now first vice president of virtual technologies and curriculum development at Countrywide Financial Corp., a financial services company in Calabasas, Calif

Berman has achieved what many managers only dream of: an effective, efficient virtual meeting.

Experts say that businesspeople — IT leaders included — generally don't run productive meetings. They allow participants to get bogged down in unfocused discussions or sidetracked checking e-mails on handheld devices. And those problems grow exponentially when meetings aren't face to face.

But in the increasingly global economy, companies can't tolerate that kind of inefficiency anymore. To get work

done, teams often need to connect virtually, and the pressure is on to do it right.

"You have to try much harder in a virtual meeting," says Naomi Karten, principal at Karten Associates, a consulting firm in Randolph, Mass.

Running a virtual meeting takes preparation, special skills to ensure that all participants are engaged and an understanding that technology should

> facilitate — not overpower the meeting's agenda.

"The technology needs to fade into the background," says Dan Rickard, Calgary, Alberta-based director of customer solutions at Elluminate Inc., a provider of collaboration software.

#### **Prep Work**

Preparation for a good virtual meeting begins well before it starts. At VA Software Corp. in Fremont, Calif., workers send out agendas and supporting materials 24 to 48 hours in advance, and Chief Technology Officer Colin Bodell expects meeting participants to read them. "The more preparation work we do, the more efficient the call." he saws.

Berman holds practice sessions to ensure success. "If the presenter doing the meeting isn't comfortable, people know it, and typically the meetings don't run very well," he says. So the first time someone is scheduled to run a virtual meeting, Berman helps with a walk-through to head off problems.

Berman remembers working with one senior-level executive who tried using a headset during a walk-through. "Every word was tough for him" because of the unfamiliar technology, Berman says, so he had the exec use his own speakerphone instead. "He was a different person. In his own environment using his own phone, he was great," Berman says.

And while you're helping presenters iron out the wrinkles, veterans suggest that you test your technology as well.

#### **Getting Started**

Start the meeting on time, says Karten. Tardiness wastes people's time and tries their patience. Depending on the technology in use, starting late can waste lots of money, too.

Always introduce all participants—
if not by name, at least by office. That
way, everyone feels like a part of what's
going on, says Guy Welty, manager of
global media networks and collaborative services at W.R. Grace & Co., a
chemical company in Columbia, Md.

Choose your words carefully. For example, virtual participants, particularly those connected only by audio, won't understand when the meeting leader points to a line item and says, "Let's talk about this."

"You really have to imagine that everyone is blind," says Rosalee Hermens, a former CIO and now principal at IT management consulting firm Hermens & Associates in Newton, Mass.

Keeping participants engaged is a challenge in any meeting, but especially in a virtual conclave. Karten remembers giving a video presentation from an office on the U.S. East Coast linked with Asia and Australia. She witnessed people getting up to get food, and she saw one participant trying to stealthily read a magazine.

Don't be afraid to single out those "digital drifters," says Jim Wagner, program manager for live virtual classroom at Sun Education, part of Sun Microsystems Inc. "We use humiliation when it's obvious someone isn't paying attention," he chuckles. "It's handled in a light way. We might say, "Turn your mute button off and get back in the meeting.' It works very well."

The more engaging the meeting, the less likely you'll need to use that kind of tactic. So don't overlook the obvious. For example, repeat questions and comments if there's a chance some participants couldn't hear the speakers.

Many experts recommend appointing a moderator or facilitator to keep the meeting moving and to help meeting leaders keep track of participants waiting to speak. "The moderator can push all the buttons and do all the [technical] stuff in the background, so the person owning the meeting doesn't have to do all that," says Wagner.

Welty assigns bridge operators from IT to monitor activity on large virtual meetings. They can mute individual connections, disconnect and redial and even adjust an individual's volume.

Choreographing a virtual meeting takes more time and effort than running a face-to-face get-together, but companies that want to compete on a global scale have no choice but to excel at this.

"It's going to take a mind change," Rickard says, "but when the culture catches up to virtual meetings, the benefit will be that instant access to information." 6 56700

Pratt is a Computerworld contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.

#### VIDEO: ITS TIME IS STILL COMING

Video has improved, but has it improved enough?

QuickLink 56705

www.computerworld.com

#### Embrace The Virtual

Virtual meetings really are offerent.
Too many organizations are trying to mimic what happens in a traditional meeting, when everyone piles into a boardroom and has a discussion, asys Dan Rickard, director of customer solutions at Elluminate.

hated, say virtual meeting veterans, harness technology to create a by new meeting experience in the virtual space.

For example, the tendency for people in virtual meetings to talk over one another is a well-known problem, but Becky Hubble may have found a solution. The Purtland, Dre.-based senior director of training and utilization services at ADF Dealer Services, a division of Automated Data Processing Inc., recently started to use Elluminate software for virtual meetings.

It enables participants to click a "raise hand" button on their computers to signal they want to talk. The meeting leader can also ask participants to answer questions presented in true/talse, yes/no or multiplechoice formats.

Remember, it's not just about connecting people via phone or video; it's about getting things done efficiently.

- Mary K. Pratt

## THIS IT STAFF



READY

MICROSOFT.COM/SECURITY/IT
Microsoft

### Find the tools and guidance you need for a well-guarded network at microsoft.com/security/IT

- Microsoft Windows XP Service Pack 2: Download it for free and get stronger system control and proactive protection against security threats.
- Free Tools & Updates: Download free software like Microsoft Baseline Security Analyzer to verify that your systems are configured to maximize security. Manage software updates easily with Windows Server Update Services.
- Microsoft Risk Assessment Tool: Complete this free, Web-based self-assessment to help you evaluate your organization's security practices and identify areas for improvement.
- Internet Security and Acceleration Server 2004: Download
  the free 120-day trial version to evaluate how the advanced
  application-layer firewall, VPN, and Web cache solution can
  improve network security and performance.

## TECHNOLOGY THAT GETS YOU US "EVERYTHING'S U

Affordable, reliable, easy to manage; eServer xSeries with Intel® Xeon™ Processors



eServer" xSeries

#### IBM eServer xSeries 226 Express

An entry-level 2-way server that offers the reliability and performance needed for day-today computing. Easy to set up and deploy, with access to all major system components.

#### System features

Up to two Intel® Xeon™ Processors 3GHz/2MB Two-way tower with

rack capability Up to 6 hot-swappable SCSI hard disk drives

Integrated RAID 0,1 Limited warranty: up to 3 years on-site3

From \$1,6394\* (Other configurations as low as \$1,229)

**IBM Financing Advantage** 

Only \$46 per months



#### IBM eServer xSeries 346 Express

Help maximize performance and improve availability in a rack dense environment with Xtended Design Architecture.™ Includes Calibrated Vectored Cooling, an IBM innovation that helps increase uptime.

#### System features

Up to two Intel® Xeon™ Processors 3GHz/2MB

Two-way 2U rack server

Up to 16GB DDR2 memory using 8 DIMM slots with enhanced memory

Limited warranty: 3 years on-site

From \$3,3154\*

(Other configurations as low as \$2,219)

**IBM Financing Advantage** Only \$93 per month<sup>5</sup>



#### IBM eServer xSeries 260 Express

IBM's newest third-generation Enterprise X-Architecture® server. Designed for companies looking for database, e-mail, Web/e-commerce or consolidated application serving.

#### System features

Up to four 64-bit Intel® Xeon™ Processors MP, up to 3.66GHz

Four-way tower or 7U rack capability

Up to 3.6TB hot-swappable SAS (serial attach SCSI) hard disk storage

Up to 64GB of memory with advanced memory protection Limited warranty: 3 years on-site3

From \$5.3994\*

(Other configurations as low as \$4,599)

**IBM Financing Advantage** Only \$151 per month<sup>5</sup>

BladeCente Flexible and easy to use



#### IBM eServer BladeCenter HS20 Express

Offers extreme flexibility and scalability, plus it helps to consolidate and simplify your infrastructure. Helps reduce power consumption and save valuable floor space.

#### System features

eServer

Up to two Intel® Xeon™ Processors 3.20GHz/2MB

Up to 14 blades per chassis Supports both 32and 64-bit applications

IRM Directors Limited warranty:

3 years on-site3

From \$2,8994\*

(Other configurations as low as \$1.669)

**IBM Financing Advantage** Only \$81 per month<sup>5</sup>

IBM TotalStorage® Simplify storage management to improve productivity



#### IBM TotalStorage DS300 Express

This entry-level, cost-effective iSCSI hostattached storage system utilizes your existing network infrastructure to deliver advanced functionality. Provides an exceptional SAN storage solution with xSeries servers for e-mail/file/print.

#### System features

3U rack mount entry-level with two controllers

Support for up to 14 Ultra320 SCSI disk drives

From \$6,4554\*

(Other configurations as low as \$2,995)

Starts at 584GB / scales to 4.2TB6 Limited warranty: 1 year

IBM Financing Advantage Only \$180 per months

All prices are IBMs estimated retal setting prices as of September 13, 2005. Prices may vary according to configuration. Resellers set their own prices, so reseller prices to end users may vary. Products are subject to availability. This document was developed for offerings in the United States. IBM mission IBM Engine price and the Company of offer the products. Endough is included in IBM Engine price and the Company of the IBM Engine price in the Company of the IBM Engine price and the IBM Engine price an

## ED TO SAYING: INDER CONTROL."



IBM Express Servers and Storage™ for mid-sized business.

Know an I.T. person who doesn't like to hear that "everything's under control"? We don't. That's why we offer an innovative management tool called IBM Director that can alert your I.T. people to potential problems up to 48 hours in advance!

And our Calibrated Vectored Cooling on select xSeries® servers helps cool your systems more efficiently. Packing more servers into a single rack. Helping to save space, energy, money.

With IBM Express, innovation comes standard. That's true for servers, storage and printers. Your local IBM Business Partner can tell you more. And remember, you can keep your technology current while helping to reduce costs — through IBM Global Financing.

Excited? No need to control yourself. Get started today.





Save time. Save costs. Save the day! (Optimize your I.T.)

#### ibm.com/systems/innovate1

1 800-IBM-7777 mention 104CE04A

#### IBM TotalStorage DS400 Express

Exceptional entry-level solution for work group storage needs. With advanced functionality, the DS400 supports xSeries servers and utilizes hot-swap Ultra320 SCSI drives for high reliability.

#### System features

3U rack mount entry-level with up to two controllers

2GB Fibre Channel storage systems area network (SAN)

From \$8,4954\*

(Other configurations as low as \$4,995)

Starts at 584GB / scales to 12TB

Limited warranty: 1 year on-site3

IBM Financing Advantage Only \$237 per month<sup>5</sup>

Credit LLC in the Linked States and other BMI subsidiaries and divisions worldwide to qualified commercial and government outcomes. Monthly payments provided are for planning purposes only and may vary based on your credit and other factors. Lesse offer provided of based on a RMI lasse of 36 monthly payments. Differ restrictions may apply. Rates and other factors. Lesse description or withdrawal activation (6.6 Dentities and storage capacity. Usable beautify may be less. BMI the BMI togo elever BusinCentry Science. Total Control of the BMI togo elever BusinCentry Science. Total Control of the BMI togo elever BusinCentry Science. Total Control of the BMI togo elever BusinCentry Science.

# MANAGERS' FORUM



I have 30 years' experience in data processing, almost entirely on the mainframe, which hasn't been in demand for some time. My skills are becoming dated, so going technical would require much training. Do you have any suggestions for people who can't decide whether to continue in the technical realm or move into management? If you want to go into management because you feel that your technical skills are outdated, I can give you advice in a single word: Don't.

If you want to go into management

If you want to go into management because you're sick of taking orders from some idiot, don't.

If you want to go into management because you don't want to learn something new, don't.

Being a technical manager is entirely different from being a technical producer. The transition is quite difficult and requires learning an entirely new set of skills. Although it's a great deal of work, it's much easier to update your technical skills than it is to transition into an entirely different career.

That said, there are many good rea-

sons to make the change.

If you love being in the middle of things, being in the know and having influence on decisions, then management may be for you.

If you are ready to accept personal responsibility for the productivity of a group and the careers of individuals in the group, then management may be for you.

If you find helping others learn to build something more satisfying than building something yourself, then management may be for you.

Our industry has way too few good managers with benevolent motives. If you've got them, by all means, join us.

However, I do want to question one of your premises. As far as I can tell, mainframe skills are not in poor demand. I was recently at a gathering of HR directors who support large IT organizations, and the biggest complaint that they had was their inability to find good mainframe people. These directors, especially those in the government and banking sectors, are absolutely terrified that they won't be able to find competent and willing people to maintain the back-end systems on which they rely.

My guess is that you can work as long as you want as a technical mainframe person. Your skills are rare and valuable just as they are.

Follow-up: Is there another realmother than management or technical? Yes, there are alternatives to following either technical or managerial career paths. In fact, as outsourcing has become more prevalent, many consider these other positions to be the most secure.

Business analysts translate business requirements into technical requirements, no management or code required. Relationship managers act as a buffer between IT and its business clients. They maintain productive relationships between the two groups and need many skills that are neither strictly technical nor managerial.

I have hired a really strong technical performer who is doing a great job. The problem is that the people who work with him continually complain to me about his poor hygiene. What can I do? So you've got a stinker! Not fun.

As a manager, I've found this situation one of the hardest to deal with. I've had to have this conversation, and it was even harder than firing someone.

Philosophically, if people are doing excellent work, their personal lives are irrelevant. Most managers wouldn't dream of telling someone what church, synagogue or mosque to attend, who to date or what jewelry to wear.

Even telling people that the clothes they choose to wear don't reflect the image that the organization wants to project is much easier than talking to someone about BO.

It's an invasion into someone's most personal habits and preferences. The only subject that I can think of that would be more difficult to discuss in an office environment would be someone's erotic life (which, luckily, hits the managerial radar screen only rarely).

But unfortunately, sometimes people do bring evidence of their personal hygiene habits to work in unmistakable ways, and you can't ignore the problem. If someone were to wear incredibly potent perfume that aggravated coworkers' allergies, few would hesitate to broach the subject.

So it is with BO. If it serves as a distraction and an impediment to productivity, you need to address it politely, directly and privately.

If your potent person is from another country, you've got a relatively easy angle. You can explain how a century of product marketing has convinced Americans that natural body smells are bad and distracting. You can say that Americans believe that artificial smells are a sign of cleanliness and virtue.

If your stinker is just a stinker, then you've got to hold your nose and tell the truth. Stick to the facts, not value judgments. Don't attack or belittle. Just explain that anonymous co-workers have brought to your attention that they are distracted by BO. Ask for the person's help respecting others' sensitivities. © 56708

#### More on Business Analysts And Relationship Managers

According to Advanced Strategies Inc. in Atlanta business analysis

- They're capable of sorting through the chaos and ambiguity of what is told to them by many people and extracting a concise description of the business.
- They can work with business users and IT professionals as a business problem-solver.
- They can act as a liaison between the technical and business worlds.
- They can analyze the business to identify problems and/or opportunities and to define solution characteristics.
- They aren't intoxicated by technology.
- They aren't users
- They don't jump ahead to designing the solutions.

According to Forrester Research Inc., relationship managers straddle IT and business

- **Communication**
- Presentation
  Critical thinking
- = Collaboration

A relationship manager's role reaches its full potential when it evolves from that of a

- collaborator and innovation facilitator, according to Forrester, Kick-start that
- Develop relationships with the research organizations of key
- Become involved with advanced or emerging technology groups within your IT organization.
- Become a member of the strategy team for the business units you
- Focus on initiatives that provide the most business value.
- Don't become the go-to person for every IT-related problem.

#### **Employers** Of Choice

The top five "ideal employers," as ranked by the IT undergraduates who were among the 29,000 U.S. college students surveyed between December 2004 and March 2005 by Universum Communications Inc.:

- **IBM**
- Microsoft Corp.
- 3 Intel Corp.
- **Apple Computer Inc.**
- Dell Inc.

Gartner Inc.'s upper estimate of the percentage of current tech workers who will drop out of the profession by 2010, not including those who retire or die. According to the research firm. most will leave because they can't get tech-related jobs or because they can get more money or job satisfaction

The amount by which Gartner expects worldwide demand for technology developers to shrink by 2010. The range of professionals who fall into that job category includes programmers and people who maintain everything from mainframes to laptoos.

#### THE TROUBLE WITH TRAINING

FORRESTER RESEARCH INC. is banging the drum for retraining. In a "Best Practices" research note, analyst Richard Peynot says experienced staffers who are transferred to a service provider through an outsourcing contract often need technical retraining - in new methodologies like ITIL and Cobit, newer development languages and integration technologies. What's needed, he says, is longterm, consistent education, but what's generally available our short, opportunistic training sessions that don't meet the new demands placed on IT.

"Sessions like 'The basics of ITIL in two days' or 'IT project management in five days' don't give IT people enough ammunition to tackle today's challenges," Peynot writes.

■ "Outsourced operation experts or outsourced developers need a thorough overview of new technologies and new methodologies; senior workers have generally received irregular training during their career; and the people targeted for IT management positions require training in a wide range of disciplines."

He encourages companies to draw up training plans designed to meet the needs of what he calls the new IT worker and to craft incentives to help them retain their best talent after training. He also calls rm businesses to work toward influencing governments and universities to create adult education courses that are designed to meet business needs.

I Page compiled by Jamie Eckle.

#### A Young Ambassador for IT

**COLLEGE STUDENTS** who wonder whether there's much left to accomplish in IT need look no further than Nizam Ishmael, a 30-year-old University of Texas graduate

who has 13 approved patents and scores more in the works. This product of public schools in

Queens, N.Y., and Lufkin, Texas, is also the youngest person to hold the title of IBM master inventor. Ishmael's actual job is to

evaluate some of IBM's alpha and beta software, and the patent work is just something extra he does.

"I am required to have a comprehensive understanding of IBM software and open-source technology at a high level," he says. "But many I know on a detailed technical level. So when I look at the software, I think of ways that it could be better, such as coming up with new functionality or updates that can be made to the user interface. Coming up with new ideas is just a small part of the solution. I also have a team I work with, and we brainstorm about all the ways to implement the ideas.

He also does integration work, which he enjoys be-

cause it has allowed him to travel the world, because he likes to solve problems and "because it connects me to the bigger things that IBM as a company is trying to achieve." And Ishmael teaches, which he says he finds satisfying because it's an ongoing challenge for him to improve his teaching and presentation skills.

"Presenting to a group of people is not something that comes naturally to me," he says. "So I took a few IBM-sponsored public speaking classes to build my skills."

Another of his roles is IBM university ambassador, furthering the work of the IBM Academic Initiative. This includes presenting at student-organized functions, holding lectures about software technology for pro-

fessors and students and educating audiences about open standards.

"I have an 18-year-old brother who just graduated from high school, so I have learned how to communicate with young people,"

"I have been giving him and his friends college advice for the past few years. We most often debate the differences between large. small and community colleges, and jobs in the corporate world vs. other jobs." he explains. "I have been working since I was 16 years old - as a fast-food manager, museum tour guide, waiter, construction worker and security guard - so I could explain the differences between the jobs have now versus the jobs they could have in the future working at a large company.

Does Ishmael think many young people will

| follow him into the technology field? "My younger brother and his friends like to ask questions related to my job and technology, so I tell them about the role technology plays in areas that pique their interest," he says. "I have gotten mixed responses from them. The high school students who spend more time on the computer seem to be more excited than the students who have less exposure to computer technologies."

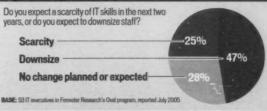
O 56677

- Jamie Eckle

### When I look at the software. I think of ways these high school grads that it could

be better. WITAM ISRNAFE IBM MASTER INVENTOR

#### Downsizing on the Horizon



#### **EXEC TRACK**

#### Ameritrade Picks Bartlett as CIO

Ameritrade Holding Corp. in Omaha has named JERRY BARTLETT C10. Bartlett previously served as Ameritrade's vice president of application development and quality assurance. Before joining Ameritade in 1999, he held various management positions at St. Paul Co. and the American Red Cross. Bartlett was recognized as one of Computerworld's 2005 Premier 100 IT Leaders.

#### Rinaldi to Head IT at NASA JPL

JAMES RINALDI was appointed CIO at NASA's Jet Propulsion Laboratory in Pasadena, Calif. He will serve on the JPL's executive and strategic management councils. Rinaldi previously was CIO at the U.S. Food and Drug Administration. Prior to that, he was director of the e-government program office and chief of IT services at the Internal Revenue Service. He also spent 16 years at Marriott International Inc.

#### Mercury Taps Claudio to Lead IT

Mercury Interactive Corp., a maker of business optimization software in Mountain View, Calif., has named CECILIA CLAUDIO CIO. Previously she was CIO at Align Technology Inc. and Zurich Financial Services.

#### Monteith Joins Masco as CIO

Masco Corp., a home improvement and building products mandacturer in Taylor, Mich., has appointed TIMOTHY J. MONTEITH In the newly created position of vice president and ClO. He will report to Masco President and Chief Operating Officer Alan Barry. Montelth comes to Masco from Domino's Pizza Inc., where he was ClO. Previously, he held several senior management positions with Thomas S. Monaghan Inc., including COO.

PAUL M. INGEVALDSON

# IT Cheat Sheet For CEOs

HERE CAN'T BE a more daunting task for a new CEO (whether promoted from inside or recruited from outside) than to try to understand the status of the IT department. It's a difficult area to become comfortable with, since most CEOs aren't schooled in IT operations.

I believe it's the responsibility of the CIO to make that educational process as productive and painless as possible. CIOs who can do that have a much better chance of reporting to the new CEO.

In an attempt to help you help your new executive through this process, I've listed eight IT areas that should be the focus of the CEO and listed the questions a newcomer should ask. I believe this series of questions and answers could allow the CEO to get a quick handle on

the IT operation and the issues that are important to top management.

#### Hardware

Let's start with our equipment infrastructure. Please describe for me our data center environment.

- What kind of equipment is located in which facilities?
- Do we have equipment outside of our facilities?
- Are major upgrades planned?

#### **Disaster Recovery**

What are our plans should a disaster such as a fire or flood incapacitate one of our facilities?

- Do we rely on a "hot" backup facility, or are we expecting to use one of our other facilities?
- Is the plan tested on a regular basis?

  If so, what have been the results?
- Please explain our current file backup and off-site retention policy.



#### **Systems Operations**

How do our operational systems work on a day-to-day basis?

- What are the really critical IT activities that could affect our business?
- Have the systems been stable or volatile over the past six months?
- Do we use an enterprise system from a single vendor, or do we bring in best-ofbreed applications?
- Do we have a lot of customized applications?

#### **New System Methodology**

How do we initiate new projects?

- Do you decide what we should work on, or is that the job of some type of steering committee? If the latter, how does that process work? If the former, how do you do it?
- Does each department pay for its own IT services, or is IT considered a corporate expense? Do you agree with this arrangement?
- Do we use consultants and/or outsourcers? If so, how is this usage determined?
- How do we track progress?
- Describe for me the major projects under development. Are any in trouble?
- How are we doing with Sarbanes-Oxley Act compliance? How about other regulatory requirements?

#### **IT Budget**

Please review for me the components of the IT budget.

■ What percentage of corporate revenue does IT department expense account for? Has this percentage been changing over the past five years?

#### IT Personnel

What is the breakdown of IT personnel, such as development or operations?

- Has this number been changing over the past five years?
- Can you review for me the makeup of your organization, its strengths and weaknesses, and your succession plan for senior leaders and yourself?

#### **System Security**

We've talked about physical security, but attempts to crack into our system and compromise our operations could be even more devastating.

- Who's in charge of security?
- Are you comfortable with his skill level and loyalty to our company?
- How do you monitor this area, and what is your assessment of our level of protection?

#### Long-Range Planning

What is your vision of how we should continue to automate and digitize our company?

- Do we have a long-range plan for IT that supports our corporate long-range plan?
  - Are you involved in that process?
- What are some interesting technologies that you think could help us?

This is by no means a complete list, but it will get the new CEO actively involved in the top-level issues that executives need to understand. The meeting to discuss these issues is one of the most important for you, the CIO. It will set the stage for the type of reporting relationship that will be established. Frame your answers in business terms that the boss can understand. Good luck! **§ 56646** 

#### **WANT OUR OPINION?**

For more columns and links to our archives, go to www.computerworld.com/opinions

Simplify your I.T. and your business. IBM servers and storage are designed to help you do just that. Take the IBM TotalStorage® DS4100 Express with DACstore. It can help you reconfigure or add capacity while staying up and running. No need to stop to reset drives.

IBM.

Because with IBM Express, innovation comes standard. That's true for servers, storage and printers. What's more, you can keep your technologies current while helping to reduce costs – through IBM Global Financing.

All things considered, an I.T. hero deserves nothing less.

## MEET 3 HEROES IN THE BATTLE AGAINST I.T. COMPLEXITY. YOU'RE THE 4TH.



#### IBM TotalStorage DS4100 Express

Ships with 1.25TB<sup>1</sup>
DACstore for configuration metadata
3.5TB with 1 controller; 28TB with 2<sup>1</sup>
Limited warranty; 1 year on-site<sup>2</sup>

From \$7,349\*

(Other configurations as low as \$6,599)

**IBM Financing Advantage** 

Only \$206/mo.

M eServer™ OpenPower™



#### IBM eServer OpenPower 720 Express

Built on IBM POWER5™ technology and tuned for Linux®

2- or 4-way 64-bit, rack or tower models Up to 8GB of memory, disk capacity up to 1.1TB1

Optional Advanced Virtualization features
DB2<sup>e</sup> Express Discover CD

Limited warranty: up to 3 years on-site

From \$9,774\*

IBM Financing Advantage

Only \$273/mo.3



#### IBM TotalStorage 3580 Express

Helps protect LTO" investment

Built on Ultrium™ 3 technology

Read/write compatible with Ultrium 2 drives

read compatible with Ultrium 1 drives

Up to 800GB cartridge physical capacity
with 2:1 compression!

Limited warranty: 3 years on-site<sup>2</sup>

From \$5,850\*

IBM Financing Advantage

Only \$164/mo.3



"All prices stated are IBM's estimated retail selling prices as of September 13, 2005. Prices may vary according to configuration. Resellers set their own prices, so reseller prices to end users may vary. Products are subject to availability. This document was developed for offerings in the United States. IBM may not offer the products, features, or services discussed in this document in other countries. 1 Denotes raw storage capacity, bushed expanely in grap be less. 2 lettephone support may be subject to additional charges. For on-set let both of diagnose and resolve the problem emercledy before sending a lactimican. On-pile warranty is available only for selected components 3. IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government countries. IBM subsidiaries and divisions worldwide to qualified commercial and government countries. IBM subsidiaries and divisions worldwide to qualified commercial and resolved in the state of the provided is based on a FMV lease of 39 monthly payments. Other restrictions may apply. Rates and offerings are subject to change, extension or withdrawal without notice. IBM. the IBM loop, eServer, Folls/Glorage. Open Power, POWERS and DB2 are frademarks or registered trademarks or literational Bissiness Machines. 2 Chi part to the United States and offer outnities. LTO and Ultrium are trademarks or Certaine. HP and IBM in the U.S. and other countries. Other company, product and service names may be trademarks or service marks of others. © 2005 IBM Corporation. All rights reserved.

Thomson Inc. is seeking a qual-illiad an Electrical Engineer. Sen-ter Member of Technical Staff in Group at its Cupreline, Californ-ia facility responsible for design-ing, developing and debugging rest time embedded software for audio-video products. Must have Bachelor's degree ar equivalent in Electrical Engineering or relat-eat fairs plus 5 years of experi-working in software and design engineering in real-time embed-ded systems. In Isu of Bachel-or's degree or equivalent in El-field plus 5 years of experience, Thomson will accept a Master's degree or equivalent in El-field plus 5 years of experience, Thomson will accept a Master's degree or equivalent in El-field plus 5 years of experience, Thomson will accept a Master's degree or equivalent in El-rial 3 years of experience in a resistance couplement in a resistance or experience in a resistance or

Extract & analyze dals through various software-programming methods to generate reports supporting HR. Provide People-Soft HR/Benefits/Payroll table maintenance & manage over 30 complex interfaces, internal and acternal to fill a company. Utilize Archard to fill a company. Outs of the company of the compa Submit your resume at www.nexteljobs.com. Must in-clude Job #21548BR. Sprint hastal is committed to an all-inclusive workforce that is reflec-

tive of our community, our mar-kets and our customers. AA EOE m/l/d/v.

Sr. HR Systems Analyst

Extract & analyze data through

of warrants systems, application and tools. Design and creat SAS Datasets from variou and tools, usergif ear oreSAS Datasets from various
ASS Datasets from various
ASS Datasets from various
files from existing SAS Datasets.
Write detailed description of
user needs, program functions
and steps required for developing and modifying computer prouser oreads, program functions
and steps required for developing and modifying computer prouser Oracle, Vasual Basic, SAS
PROC Tools, Shell Scripts,
Exceed, Unix, VAVVMS, and
Windows NT/ZDDD. Masters or
Equivalent in Computer SciEquivalent in Computer Sci
Equivalent in Computer Sci equivalent in Computer Science, MIS, C. Engineering concerns, and the concerns of the computer related field. Minimum five years of experients in this computer related field in a cilindar research organization or pharmaceutical firm with the above lipid of these. Sallay with the above lipid of the computer with the above figure in the computer of t

Vica President. Java Architect. Deutsche Bank, a global finan-cial institution, is seeking a Vice President, Java Architect for their New York (10) office to pro-vide JEEE-based project man-agement for the re-engineering, re-schillecture, re-design and forms. Qualified applicants must have as I least a Master's degree in Comp. Sci., Comp. Engin. or Info. Sys.; 5 yrs' exp. in the financial serviciae inclusive pro-viding project lead-insepties in architect & Implementation of distributed financial solutions, multi-lier enterprise solutions

Intelligent in the second of twelville in the second of twelville in the second of twelville in the second of the licensing requirements to commercialize new technologies Experience may have been gained prior to completion of Master's degree. Salary and benefits commensurate with experience. Send resumes to Attn: Job # 9008, 10330 North Meridian Street, Indianapolis, IN 46290-1976.

Net Senior. Software. Architect.
Responsible for Net & Cet
development & architecture.
Support & development & architecture.
Support & develop new functionality for Venture Capital
Application for bank. Design
components using Rational
Unified Process. Write code &
develop programs; Debug. Resp.
Act or Object-oriented exp.
CRICH--x MAIL, MS Reporting
Service. Analytical Modelling &
storing SGL Server plus filancial
architecture.
Server plus filancial
pretermol, Fax. Support for Tech
3-3-2039. Altr. Matt Weber &
Signature Consultants 128 S.
Tyron. #850, Charlotte, NC
28202

G2 SwitchWorks Company is seeking a qualified candidate for seeking a qualified candidate for the position of Director of Databasis Technologies at exer office. In Chicago, Illinois, Will be responsible for designing, architecting, and managing G2 databases, including transactional and reporting databases. Candistate must have a Master's degree in Computer Science, Computer Engineering, or a reliated computer Engineering, or a reliated computer degree, or Illinois Candistate Candistat lated computer degree, or for eign equivalent, along with pro-fessional experience communic ing management procedures for internal and third-party mainte nunce of databases and estab mance of databases and estab-lishing capacity growth plans for databases. Please apply to Mar-garet Smith, G2 SwitchWorks Corp., 233 South Wacker Drive, Suite 3960, Chicago, Illinois 60606. G2 SwitchWorks is an Equal Opportunity and Affirma tive Action Employer, M/F/D/V.

IT consulting firm with HQ in Vermont has multiple openings for IT professionals to serve multiple clients throughout the U.S. Job duties include: Analysis, design, development and testing of computer applications. Specific skill sets needed include:

UML Modeling JO-090
 EAI Development JO-100
 AS400 JO-110
 Mainframe Development JO-120

degree in a related field and 1-2 yrs. of exp. w/specific skill sets. Some entry level positions are available & require a M.S. degree & related coursework or gree & related coursework or sizp. Some sentior fevel positions are also available & require 5 yrs. of progressive exp. Compet-tive salaries. Must be willing to travelfrelocate. Sand resume to: jobs@iffe.otb/S.com. Refer to specific JO# for consideration. Applicants must have authority to work permanently in the U.S.

Sr. Systems Administrator.
Administer, Invubleshood & Inolder Control of State Control
ware, Internet services, riverk
applics, & poerating systems.
Exp read with: Nivorking TcP/I
IP (SIMMB SBQ), ADSL: Applic
Chicket, Lyris ListMgr, PlayFlowPro, Intell. Lives Usaffag, PlayFlowPro, Intell. Lives Usaffag, PlayFlowFlow, Intell. Lives ListMgr, PlayFlowChicket, Lyris ListMgr, PlayFlow
Greating systems unfulciturus,
Wins, Cisco IOS Regents: Misday in Camp Signaters &
Signation of the Control
with Control
with Control
ListMgr, PlayFlow
ListM

#### ATTENTION: Law Firms IT Consultants Staffing Agencies

Place your Labor

Certification ads here!

Are you frequently placing legal/immigration advertisements?

Let us help you put together a cost effective program that will make this time-consuming task a little ensier.

Call 800-762-2977 IT careers Find out how to get the most out of your job search and your career.

#### Computerworld's **Careers Knowledge** Center



Get the latest industry news, as well as valuable job- seeking and career enhancement advice.

Read about IT-related issues such as:

- Hiring/recruiting
- Education/training
- Consulting/contracting
- Skills

Remember, knowledge is power, and the Careers Knowledge Center is the place to get it!

Go to www.computerworld.com today.

Software Engineer: Hetrosys, LLC, is seeking applications for the position of Team Lead (Software Engineer) in Detroit, MI and other nationwide opportunities. Design, engineer and creatile architecture for J2EE webbased software applications Requirements include Master's degree or equivalent in Comput er Science, Information Technology or related field and two ears experience i a softwar ngineer. Postion also require: working knowledge of Struts Open Source Web application framework; integrating IBM Main Frame Application Framework; esigning and developing J2EE web-based architecture. Apply wie U.S. Mail with renume to Hetrosys, LLC, 1382 Trestle-wood Dr., San Jose, CA 95138.

PROGRAMMER ANALYST w/ Bach or foreign equiv in Comp Sci, Engg or Malli & 1 yr exp to analyze & dvlp technical dsgn & soci, cargo Michael Mortine and door a flow diagrams. Dvip project using Netscape Enterprise Server, Jave Boans, Jave Server Pages, Jave Service, Apuche Tomcat & Jave Script on Sun Schief & Win NT. Conduct & deploy Jave Code. Involve in Unit Testing, Implint Jave Frame Work using MC-2D by giff flee by the Service Ser

Project Manager needed in MN, CA & other unanticipated client sites to dvlp systms & processes necessary for re-cruitment, tracking, planning 8 execution of projects: dvlp project plan; budget & forecas sign staff; prgm in Java 12FE & XML technologies ing prams, continuing ed 8 paths. Read travel as reeded. Resume to: CS Solutions, Attn: C. Sonju, 2626 E 82nd St #151, Bloomington

Thomson, Inc. is seeking an Optical Engineer for its Burbank location to participate in al hases of design/developme f optical systems and optical mponents for projection telesions. Must have a Master egree or foreign equivalent in Applied Optics or released field plus three years of experience in the related occupation of op-cal design. Salary and benefit mmensurate with experience Send cover letter and resume to: Thomson, Inc., ATTN: Job #9010, 10330 North Meridian Street, Indianapolis, IN 46290-

Systems Analyst: Analyze chitect, develop, integral A Test Multi-Tier Enterprise Applications & products us ing C#, ASP.NET, ADO.NET Web Services, UML WINSOCK network pro gramming, SOAP & SQL Server database. Req. Bachelor in Comp. Sci. or Engg. or related & 2 yrs of

Send resume to HR Cybersoft Technologies, Inc. 4422 FM 1960 West. Ste 300, Houston, TX 77068.

Sr. Telecmmunicat'n S/ware Engr. Los Angeles, CA. MS-Comp. Sci or related filed = 2 yr exp in job or secomp rsrch engr. Dsgn telecommunictn next gener-atn emisse ntwrk systm & dvip ath surium newk systm 5 dely converged vice similar sprice intriacing of GSM/GPRS/PSTN signaling procost, Priticipate in requiremt gather grachitcure & systm dsgn. dsgn. rdsgn. dntify & rsolve almost systement system on-site for customi Req'd skills: GSM Signal'g prto telecommunicatn wild inc. SS7, GSM, SIGTRAN, UMTS, 3GPP, C/C++, Jave, XML, Linux/UNIX & Window operat'g systm; Prtocol simulatn & test'g; OO dsgn, UML & s/ware devt lifecy-cle. Send resume to HF Manager, Lotus Interworks, Inc., Ste 200, 11833 Mississippi Ave, Los Angeles, CA 90025.

Kintera, Inc., located in Sar Diego, CA, seeks a Data base Administrator. The posi tion requires a Masters Degree in Computer Science and 1 year of experience in ise design & develop ment, performance optimiza tion, database support in-cluding data integration, trouble shooting 5 replication monitoring, send resumes to HR, Kintera, Inc., 9605 Scranton Rd., San Diego, CA 92121 or Fax it to 858-795-3010, Attn: Ailina Wong.

#### Software Developer

Dvlp e-Commerce s/w using Microsoft Visual Studio.Net. Send resume to: Meredith Johnstone. Human Resource, The Bell Group, 7500 Bluewater Road NW. Albuguerque, NM 87121 or Fax 505-938-3361.

EOE

For Macon, GA. Software Developer: Will Develop and deliver enhancements, fix problems, perform product updates atween CTI components usin various tools. Masters Degre equired Technical Writer W required. I confice in writer, wife facilitate It completion of various projects using Robohel Authorware, Visio and powe point. Bachelors Degree in con-puters, English, or literature and two years experience required 40 hrs/week, competitive salary Send resume (no calls) to: HF Manager, Broadfusion, Inc.; 133 North Pointe Blvd.: Macon, GA.

Harcourt Assessment, Inc., an industry leader in clini cal/educational assessmen testing, located in San Antonio, TX, seeks an exerienced Software Enginsur to develop and suppor Java solutions imple in relation to the Uniso platform or its interfaces Send resume to: HR Coordinator, 19500 Bulverde Rd., San Antonio, TX 78259-

Comp Programmer & Sys Er wanted by Sunrise Global In in Sayreville NJ. Each position squires MS in Comp Sci er allated field and min 2 try exp. rogrammer dutied incl: writing, pdating & maintaining computer programs w/ cryptographi policy, three-tier arch & object iented technology. Sys Eng's itles incl: designing, installing administering integrate cured network & dalabas system within different plat forms, infrastructures & eDirectories. Send maurine to hi@sunriseglobalinc.com or fex to 732-651-9998.

Transbeam, Inc. located in New York, NY seeks an IT Specialist. The position requires a Masters degree in Computer Science and 3 nonths telecom experienc in troubleshooting, comple roblem solving, and de signing and implementing VOIP networks. Fax re umes to Avi Netrei, VP at 646-619-4359 or mail re umas to Transbeam, Inc. 20 W. 36th St., 2nd Floor New York, NY 10018 Attn Avi Nebel

Regional Acceptance Corp atumes Application Programmer for program design, coding, test-ing, documentation and report-ing within Oracle Distill Ware-house environment using Oracle 91/10g, Oracle Real Application clusters, Oracle Warehouse Builder, Compaq Tru64 Unix; rend recovery strategies using trace Dataguard. BS or equit of Computer Science or relate etd plus two years emperiment ax resumes to: 252-353-1854

Comp Programmer wanted by Crystal Window & Doo System, Inc. Flushing NY Requires MS in Comp Sci or elated field & min 2 yrs exp Duties incl: planning, de signing, developing & com ling code in ERP system & correcting errors detected in compile process with crypto graphic policy, three-tie arch & object-oriented techology. Send resume to hr@crystalwindows.com or fax to 718-460-4594

Multiple positions, Stamford, CT: Software Quality Assurance Analyst: Validate computer sys-tems as am FDA regulations and international cGXP's guide-Allary as entered to the control of Jäve, Jave based tecis, Visua Basic, Troublehoot, maintain existing applications. Boffware Quality Assurance Analyst Coulty Assurance Analyst Country Assurance Analyst Country Assurance Analyst Country Assurance Analyst Country and Co



For over 20 years, Syntel employees across North America, Europe, and Asia have helped build advanced information technology systems for leading Fortune 500 companies and government organizations to improve their efficiency and competitiveness. Today, Syntel professionals are building rewarding careers by providing solutions in e-business, CRM, Web Design and Data Warehousing. Come discover why Syntel has been ranked one of "The 200 Best Small Companies in America" for the last four years in a row.

Due to our rapid growth, we have immediate, full-time opportunities for both entry-level and experienced individuals in the following positions:

Business Development/Account Specialist
Manage Sales activities and achieve sales quota for assigned territory. Help
Syntel's sales leadership in planning and rollling out an inside sales strategy.

**Project Leaders/Managers** 

Train and manage programmer analysts on installation and configuration of hardware and software application, as well as be responsible for project planning and quality assurance.

Programmers/Analysts

Analyze, design, develop, test, and maintain relational database management systems.

The above mentioned positions should possess any of the following skills:

Mainframe

. IMS DM/DC or DB2, MVS/ESA, COBOL. CICS

- ORACLE OR SYBASE
- Client-Server/WEB
- · Ab-initio Websphere
- · Com/Dcom
- Web Architects
- Datawarehousing
- Informix, C or UNIX Oracle Developer or Designer 2000
- JAVA, HTML, Active X
- Web Commerce
- . SAP/R3, ABAP/4 or FICO or MM & SD

- DB2
- Oracle Applications & Tools Lotus Notes Developer

· Focus, IDMS OR SAS

- UNIX System Administrator
   UNIX, C, C++, Visual C++,
- CORBA, OOD or OOPS • WinNT
- Sybase, Access or SQL server
   PeopleSoft
- Visual Basic
- PowerBuilder · IEF

Some positions require a Bachelor's degree, others a Master's degree. We

Some positions require a bachelor's degree, others a master's degree. Yet also accept the equivalent of the degree in education and experience. With Syntel (NASDAQ: SYNT), you'll enjoy excellent compensation, full benefits, employee atock purchase plan and more. Pleass forward your resume and salary requirements to: Syntel, Inc., Attn: Recruiting Manager-CG09, 525 E. Big Beaver, Suite 300, Troy, MI 48083. Phone: 248-619-2800; Fax: 248-619-2800; F 619-2888; Equal Opportunity Employer.



#### COMPUTERWORLD HEADOUARTERS

One Speen Street, P.O. Box 9171 Framingham, MA 01701-9171 Phone: (508) 879-0700 Fax: (508) 875-4394

PRESIDENT/PUBLISHER/CEO Matthew J. Sweeney (508) 271-7100

**EXECUTIVE ASSISTANT TO CEO/** CORPORATE COMMUNICATIONS MANAGER

Laureen Austermann (508) 820-8522

VICE DESIDENT GENERAL MANAGER ONLINE

Martha Connors (508) 620-7700

VICE PRESIDENT/MARKETING Matt Duffy

(508) 820-8145

**EXECUTIVE VICE PRESIDENT/** STRATEGIC PROGRAMS

Ronald I Milton (508) 820-8661

**VICE PRESIDENT/ONLINE SALES** 

Gregg Pinsky (508) 271-8013

VICE PRESIDENT/ **HUMAN RESOURCES** 

Piner Sheer (508) 820-8162

**EXECUTIVE VICE PRESIDENT/COO** 

(508) 820-8102 VICE PRESIDENT/ **EDITOR IN CHIEF** 

Don Tennant (508) 620-7714

**VICE PRESIDENT/CIRCULATION** 

**Debbie Winders** (508) 820-8193

CIRCULATION Sr. Circulation Specialist/Diana Turco, (508) 820-8167

PRODUCTION Vice President Production Manager (508) 820-8232. Fax: (508) 879-6489: DISTRIBUTION: Director of Distribution and Postal Affairs/Bob Wescott

#### STRATEGIC PROGRAMS AND EVENTS

STRATEGES POWENAMS AND EVENTS 
The Paradian Strategic Initiative (Ju. Lo Jagor, Vitra Financianet Dusiness Development (John Aureus; Senior Director, Event Sporacorbi) 
Sissella VII Halime, Vite Phratient, Event Minderlang aut Corrector 
Programs (Senior Halitary, Director, Event Management (Michael 
Malliamet, Programs Develock, Computerwood Horson Programs Spandal 
Malliamet, Programs (Develock, Computerwood Horson Programs Spandal 
Well: St. Markeling Spozialist (Terbora), Schotson St. Markeling 
Josephin (Senior), Schotson St. Markeling 
Josephin (Senior), Schotson St. Markeling 
Josephin (Josephin Spozialist) 
Leiter 
Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Josephin Spozialist) 

Josephin (Jose with Essentivi Programs operanis/Lindovant Liber Australia (1997)
Specialist/Chris Loger Conference Manager/Many Fishki-erit: Opera-liens Specialist/Chris Johnson; Customer Service Specialist/Mille Barbate; Bullienca Development Coordinator/Shan Ebb, Ene Speen Silved, Box 9171, Framingham, Mil N701-9171, (508) 879-0700, Flax: (508) 626-6524

#### ONLINE ADVERTISING

Director of Online Sales Seen Weglege, (415) 978-3314, Flux (415) 543-9010; Chrime Gales Menagor, East Coast/James Kalbach, (610) 901-1588: Online Account Executive/Thanh Tu, (415) 978-3309, Flux 4(4) 5(4) 5(4) 5(7) (fallier Account Services Manager/Sell Right, (508) 5(2) (4) 5(4) 5(7) (fallier Account Services Manager/Sell Right, (508) 5(2) (4) (fallier Services 5(2) (4) (fallier Services 5(4) (fallier Sellier Sel e Sales Assistant/Nathy Show (SU6) 270-7112; One Speen Str Bian Itili II. Framingham, MA 01701-9171, Fax: (508) 270-9882

IT CAREERS ADVERTISING SALES OFFICE Director of Sales/Laura Wilkinson, (847) 441-8877, Fax: (847) 441-8876: One Speen Street, Framingham, MA 01701

#### LIST RENTAL

LIST REPLIAL
POSTAL: Rich Green, (508) 370-0832, e-mail: green
@idglist.com. E-Mail: Ciristine Cahill, (508) 370-0808,
e-mail: ccahill@dglist.com. BRALLING ADDRESS: IDG List
Services, P.O. Box 9151, Framingham, MA 01701-9151, Fax: (508)
370-0020

#### **COMPUTERWORLD SALES OFFICES**



PRESIDENT/PUBLISHER/CEO

Matthew J. Sweeney (508) 271-7100 Fax: (508) 270-3882

SALES INTEGRATION DIRECTOR

Laurie Marinone (508) 628-4823 Fax: (508) 270-3882

NORTHWESTERN STATES

ACCOUNT DIRECTOR: Jim Barrett (415) 978-3306: **ACCOUNT EXECUTIVE: Coretta Wright (415) 978-**3304, 501 Second Street, Suite 114, San Francisco, CA 94107, Fax: (415) 543-8610

ACCOUNT DIRECTORS: Jim Barrett (415) 978-3306. Sara Culley (415) 978-3307; ACCOUNT EXECUTIVES: Emmie Hung (415) 978-3308, Coretta Wright (415) 978-3304, 501 Second Street, Suite 114, San Francisco, CA 94107, Fax: (415) 543-8010

SOUTHWESTERN STATES

ACCOUNT DIRECTOR: Bill Hanck (949) 442-4006 ACCOUNT EXECUTIVE: Jean Dellarobba (949) 442-4053, 19200 Von Karman Avenue, Suite 360, Irvine, CA 92612, Fax: (949) 476-8724

EASTERN CENTRAL STATES/ INDIANA

ACCOUNT DIRECTOR: Peter Mayer (201) 634-2324: ACCOUNT EXECUTIVE: John Radzniak (201) 634-2323 650 From Road - 2nd Floor, Paramus, NJ 07652 Fax: (201) 634-9289

#### CENTRAL STATES

ACCOUNT DIRECTOR: Bill Hanck (949) 442-4006 ACCOUNT EXECUTIVE: Jean Dellarobba (949) 442-4053, 19200 Von Karman Avenue, Suite 360, Irvine, CA 92612, Fax: (949) 476-8724

NEW ENGLAND STATES

ACCOUNT MANAGER: Deborah Crimmings (508) 271-7110, One Speen Street, Framingham, MA 01701, Fax: (508) 270-3882

METRO NEW YORK

ACCOUNT DIRECTOR: Peter Mayer (201) 634-2324: ACCOUNT EXECUTIVE: John Radzniak (201) 634-2323, 650 From Road - 2nd Floor, Paramus, NJ 07652. Fax: (201) 634-9289

SOUTHEASTERN STATES

ACCOUNT DIRECTOR: Lisa Ladle-Wallace (904) 284-4972, 5242 River Park Villas Dr., St. Augustine, FL 32092, Fax: (800) 779-8622

#### ADVEDTICED'S INDEV

| ANACE I 19EU 9 IUNEV  |           |
|---|-----------|
| Avaya   | 67        |
| CDW Corporation   | 17        |
| Cingular  | 72        |
| Cognos  | 18-19     |
| EMC24   | /25*      |
| FileNet   | 3, 36     |
| Hewlett-Packard Blade Server www.hp.com   | 15        |
| Hewlett-Packard Brand   | . 8/9     |
| Hewlett-Packard ProLiant Server www.hp.com  | .47*      |
|   | 21, 23    |
| IBM Systems Seller Group54-5  | 5, 59     |
| IDC IT Forum & Expo 2006 www.ldcitexpo.com  | 9         |
| Intel   | 10-31     |
| Juniper Networkswww.juniper.net   | 28        |
| Lenovo  | 8-39      |
|   | 1,53      |
| Microsoft Windows Server System microsoft.com/wssystem  | .2-3      |
| Polycom   | 5,37      |
| Premier 100 IT Leaders<br>Southwest Summit<br>www.premier100.com/regional   | 65        |
|   | 1, 43     |
| SAS   | 5, 69     |
|   | 6-27      |
| Sterling Commerce   | 4         |
| Storage Networking World Fall 2005 . www.snwusa.com   | 63        |
| Sun Microsystems  | 71        |
| SunGard Availability Services www.sungard.com   | 34        |
| Sybase  | 11        |
| Time Warner Cable Commercial Service<br>(Road Runner Business Class)  | es<br>48  |
| Xerox Office Group  | 32        |
| *Regional Select Edition  | -         |
| This tudox to previded as an additional service. The pu-<br>done not assume any trability for service or desirate | in France |

#### INTERNATIONAL DATA GROUP

CHAIRMAN OF THE BOARD

CEO Pat Kenesiv

PRESIDENT, IDO COMMUNICATIONS Bob Carrigan

Bob Carrigan

MF-VITERWORLD be bushiness unit of IDG, the
drs leading technology model, research and event
drs leading technology model, research and event
happy, IDG publishes more than 300 magazines
newspapers and offers online users the largest
work of technology-specific sites around the world
ugh IDG-net (www. Jds. net), which comprises more
a leading producer of 186 computer-valued events
a leading producer of 186 computer-valued events
at leading producer of 186 computer-valued events
are sited to research and event of the computersite and the site of the computer value of 60 computersite and the site of the computer-valued events
are sited to research and event of the computersited sited the sited of the computersited sited sited the computer value of the computersited sited sited the computer value of the computersited sited sited



#### Have a problem with your Computerworld subscription?

STATE

We want to solve it to your complete satisfaction, and we want to do it fast Please write to: Computerworld, P.O. Box 3500, Northbrook, IL 60065-3500.

Your magazine subscription label is a valuable source of information for you and us. You can help us by attaching your magazine label here, or copy your name, address, and coded line as it appears on your label. Send this along with your correspondence.

ADDRESS CHANGES OR OTHER CHANGES TO YOUR SUBSCRIPTION

All address changes, title changes, etc. should be accompanied by your address label, if possible, or by a copy of the information that appears on the label, including the coded line

YOUR NEW ADDRESS GOES HERE:

ADDRESS SHOWN: Home Business

TITLE COMPANY ADDRESS

NAME

it is better to write us concerning your problem and include the magazine label. Also, address changes are handled more efficiently by mail. However, should you need to reach us quickly, the following toll-free number is available: (869) 559-7327 Outside U.S. call (847) 559-7322.

TTLE





COMPUTERWORLD

#### **Learn How to Achieve Storage Networking Success**

October 24-27, 2005 • JW Marriott Grande Lakes Resort • Orlando, Florida



#### Featured Speakers Include:



#### YURI AGUIAR

Senior Partner, Chief Technology Officer Oailw & Mather Worldwide



#### KEN BLACK

Global Storage Achitect



#### **KARLTON JOHNSON**

Lieutenant Colonel, U.S. Air Force US Army War College, Class AY06



#### JOSEPH TUCCI President & CEO

**EMC** Corporation



#### JAYSHREE ULLAL

Senior Vice President, Data Center, Switching & Security Technology Group

PLATINUM SPONSORS

#### The Leading Conference for:

- IT Management
- Storage Architects
- IT Infrastructure Professionals
- Business Continuity Planning Experts
- Data Management Specialists
- Network Professionals

To register or for more information, visit www.snwusa.com

Attendees at Storage Networking World Fall 2005 will see solutions from companies including:

MEDIA SPONSORS

INFOSTOR

EMC<sup>2</sup> DILIGENT IBM MPDATA Quantum -

GOLD SPONSORS BLUE-ARC ciena engenie EPCIA Finisar FUITSU Infortrend ONARO' Gerland









DSstar



CONTRIBUTING SPONSORS

Sun symantec.

PRE-CONFERENCE GOLF OUTING SPONSOR Quantum

TACIT THE TOPIO Wasabi

PLATINUM PARTNER PAVILLION SPONSORS

EMC' Microsoft

Co-Owned and Endorsed by SNIA

Co-Owned and Produced by COMPUTERWORLD

For sponsorship opportunities, call Ann Harris at 508-820-8667

# How to Contact

We invite readers to call or write with their comments and ideas. It is best to submit ideas to one of the department editors and the appropriate beat reporter.

Don Tennant, (508) 620-7714

Mitch Betts. (301) 262-8243

Julia King, (610) 532-7599

#### DEPARTMENT EDITORS

| Craig Stadinari, Niles editor        | (508) 820-8120 |
|--------------------------------------|----------------|
| Mile Bucken, assistant News editor   | (508) 820-8562 |
| Terreny Paternasi, Technology editor | (508) 620-7729 |
| Kathleen Melymuka, Management editor | (508) 820-8118 |

#### REPORTERS

| network/systems management   | (508) 820-856 |
|--|---------------|
| <b>Heather Mavenetsin,</b> business intelligence; application web services; application server software; health care |               |
| Thomas Hoffman, IT management and investment issues: careers/labor; energy industry                                  | (845) 988 963 |
| Lucas Meariam, storage; disaster recovery and business continuity; financial services industry                       | (508) 820-821 |
| Linds Reconcrance, general assignment;<br>transportation and automotive industries                                   | (508) 628-473 |

| Carel Sliwa, Windows: Linux;<br>RFID; retail industry  | (508) 628-473  |
|--|----------------|
| Marc L. Sengini, ERP; supply chain; CRM;<br>databases; food and agribusiness                                 | (508) 820-8182 |
| Patrick Thibodeau, enterprise systems; Unix: outsourcing and immigration; antitrust issues                   | (202) 333-2448 |
| Jallosmar Vijayan, corporate security/privacy issues:<br>manufacturing industry                              | (630) 979-8890 |
| Todd R. Weiss, general assignment; open-source com-<br>intellectual property issues; messaging/collaboration |                |

#### OPINIONS ...(503) 252-0100

| FEATURES                                   |                |
|--|----------------|
| Ellen Fanning, special projects wiltor     | (508) 820-8204 |
| Robert L. Mitchell, rational correspondent | (508) 820-8177 |
| Mark Hall, editor at large                 | (503) 391-1158 |
| Gary H. Author, national correspondent     | (703) 536-9233 |
| Julia Wine, national correspondent         | (610) 532-7599 |

| COMPUTERWORLD.CO                               | M              |
|--|----------------|
| Martha Conners, vice president/general manager | (508) 620-7700 |
| lian Lamont, online projects editor            | (508) 820-8187 |
| Sharon Machille, managing editor/online        | (508) 820-8231 |
| Kim Mingis, online news editor                 | (508) 820-8545 |
| Marine Proken, online editor at large          | (508) 620-7717 |

ENTERPRISE APPLICATIONS

| David (Larne), e-mail newsletter/online editor a | it large(509) 820 8269 |
|--|------------------------|
| John R. Brillian, associate art director         | (508) 830-8296         |
| Dawn Petersen, production designer               | (508) 820-8131         |

Michael Welse. Web producer Futer Smith, Web development manager Nevin Berich, Mark Severy, Web developers

#### RESEARCH

Mari Haufe, research manager Geraale Wilson, research associate

#### COPY DESK

Michele Les DeFilippo, managing editor/production ...(5/88) 820-8126 Bob Flamson, assistant managing editor/production ......(508) 271-8015

Milke Parent, Monita Sambatare, senior capy editors Esquire Demattre, copy editor

#### GRAPHIC DESIGN

| Stephanie Faucher, design director | (508) 820-8235 |
|------------------------------------|----------------|
| April O'Connor, associate art di   |                |
| Julio Quinn, senior designe        |                |
| Susain Cahill, quarries coordin    | ator           |

#### John Klosener, cartoonist **ADMINISTRATIVE SUPPORT**

| Linda Gornone, office manager | (909) 820-8176 |
|-------------------------------|----------------|

#### CONTRIBUTING EDITOR

| Jamie Eckle, Opinions (617) 596- | 18 |
|----------------------------------|----|
|----------------------------------|----|

#### CONTRIBUTING COLUMNISTS

Michael Gartenberg, Dan Gillmor, Faul Glee, Barbara Gomoleki, John Halamka, Thornton A. May, David Moschella, Bart Parkins, Virginia Robbins, Bruce A. Stewart

#### CONTRIBUTING WRITERS

Mary Brandel, Stacy Collett, Russell Kay, Mary K. Pratt, Drew Robb

#### GENERAL INFORMATION

#### TELEPHONE/FAX

Main phone number . . . (508) 878-0700 All editors unless otherwise noted below Main fax number . . . . . (508) 675-8931 24-hour news tip line. . . (509) 620-7716

#### E-MAIL

Our Web address is www.computerworld.com. Staff members' e-mail follows this form: tname\_lastname@computerworld.com

#### LETTERS TO THE EDITOR

MAIL ADDRESS PO Box 9171, 1 Speen Street, Framingham, Mass. 01701

#### SUBSCRIPTIONS/BACK ISSUES

Subscription rates: U.S., \$99.99/year; Canada, \$130/year; Central and South America, \$250/year, all others, \$295/year

| Phone        |    | <br> | (898) 559-7327 |
|--------------|----|------|----------------|
| E-mail       | ×. | <br> | . cw@omoda.com |
| Back issues. |    | <br> | (888) 559-7327 |

#### REPRINTS/PERMISSIONS

| ContactRonco Smith                          |
|---|
| Phone(717) 399-1800, ext. 172               |
| E-mailreprints@computerworld.com            |
| Visit www.reprintbuyer.com to obtain quotes |

#### COMPANIES IN THIS ISSUE

| ABISCILLIVE SOFTWARE COMP 33   |
|--|
| ACE HARDWARE CORP  |
| ACTIVEWORD SYSTEMS INC70   |
| ADWANCED MICHO   |
| ENEVICES INC   |
| ACMINICED STRATEGIES INC 56  |
| AED37  |
| AERIA ENERGY LLC   |
| ARRESPIACE INC. 14   |
| ALACRIS INC  |
| ALIAS SYSTEMS INC  |
| ALIGN TECHNOLOGY INC. 58   |
| ALLIED HOME MORTBADE   |
| CAPITAL CIDRIP 1.16  |
| ALLSTATE INSUFFMICE CO 10  |
| AMERICA DIVI INF INC. 43   |
| AMERICAN RED CROSS   |
| AMERITRADE HOLDING CORP58  |
| APPIDING   |
| APPLE COMPUTER INC. 57   |
| APPEIREAM INC.48   |
| ARDENCE ME   |
| AUTOMATED DAVA   |
| PROCESSING INC   |
| AVAVA INC  |
| AVENTAIL CORP  |
| SARRACIOA  |
| NETWERKS INC   |
| BARF CORP  |
| BEST SIGFTWARE INC   |
| BMC SOFFWARE INC   |
| BUCKS COUNTY   |
| EXMANDER TV COLLEGE  |
| BUDD LURINER PC22  |
| BULL EVIDAN  |
|  |
| BULL IIA12   |
| BULL IIA 12 III. III. III. III. III. III. III. III |

| 1  | oegins. Company names cen allur be          |
|--|---|
| The same of the sa | CARNEGIE MELLON UNIVERSITY. 10 CERNIER CORP |
|  | DETERMINA INC                               |
|  | DEUTSCHE BANK                               |
|  | SECURITIES INC                              |
|  | DOMINO'S PIZZA INC                          |
|  | CEIFHAM UNIVERSITY 37                       |
|  | EBAYING 70                                  |
|  | EDS (AUSTRALIA) PTY                         |
|  | ELECTRONIC DATA                             |
|  | SYSTEMS CICIPP                              |
|  | ELLUMINATE INC                              |
|  | EME CORP 20, 22, 24                         |
|  | ENATEL SAS12                                |
|  | ENCOMPASS 8                                 |
|  | ENDERLE GROUP7                              |
|  | ENDFRENT TECHNOLOGIES                       |
|  |   |

| CONSULTING                            |
|---------------------------------------|
| COMODETHO                             |
| EVERGREEN SYSTEMS INC 22              |
| EVOLUTIONARY TECHNOLOGIES             |
| INTERNATIONAL INC                     |
| FBI                                   |
| FEDERAL SOURCES INC                   |
| FEDERAL SOURCES INC10                 |
| FORRESTER RESEARCH INC7, 12.          |
| 14, 10, 29, 50, 57                    |
| FORUM OF INCIDENT RESPONSE            |
| AMD SECURITY TEAMS                    |
| AND SECURITY TEAMS16                  |
| FRONTPAGE SOLUTIONS                   |
| USA INC                               |
| F-SECURE CORP                         |
| BURTHER INC 1, T, 20, 29, 35, 42, 57  |
| URRETHER INC 1, F, 20, 29, 30, 41. 57 |
| GLOBAL GRID FORUM                     |
| GOOGLE INC7                           |
| GOVERNMENT                            |
| ACCOUNTABILITY OFFICE 10              |
| GREEN MOLINTAIN                       |
|                                       |
| COFFEE ROASTERS INC1                  |
| GROOVE NETWORKS INC                   |
| GULF POWER CO66                       |
| H THREE INC                           |
| HWWWPD PILGRIM                        |
| HIBBOORIEG PILORIM                    |
| HEALTH CARE INC                       |
| HERMENS & ASSOCIATES                  |
| HEWLETT-PACKARD CO B. II. 12. 14.     |
|                                       |
| HILTON HOTELS CORP                    |
| HITACHI DATA SYSTEMS CORP             |
|                                       |
| HOME & GARDEN TELEVISION 42           |
| HYPERION SOLUTIONS CORP               |
| IBM                                   |
| IDC                                   |
| IGLU.COM LTD                          |
| IGLU.COM LTD                          |
| ILLUMINATA INC                        |
| IMLOGIC INC43                         |
| IMPERIAL COLLEGE LONDON 37            |
| INFONOX INC                           |
| INFORMATION SYSTEMS AUDIT             |
| AME CONTROL ASSOCIATION 1             |
|                                       |
| INFRAVIO INC43                        |
| INSIGHT 846                           |
| INTEGRIEN CORP 8                      |

| CATIONS             | I americana an                  |                                     |
|---------------------|---------------------------------|-------------------------------------|
|                     | INTELLIREACH CORP70             | NEXTPAGE INC46                      |
| 49                  | INTEREX8                        | NIMCAT NETWORKS INC8                |
| MS INC22            | INTERNAL REVENUE SERVICE58      | NORTEL NETWORKS CORP 10             |
| HNOLOGIES           | INTERNET SECURITY               | OPENVIEW FORUM                      |
| 10                  | SYSTEMS INC                     | INTERNATIONAL8                      |
| 49                  | KOWA STATE UNIVERSITY           | ORACLE APPLICATIONS                 |
| INC10               | IRON MOUNTAIN INC1              | USERS GROUP68                       |
| RCH INC7, 12.       | ITANIUM SOLUTIONS ALLIANCE6     | ORACLE CORP                         |
| 14, 16, 29, 50, 57  | J.P. MORGAN SECURITIES INC12    | OREGON STATE UNIVERSITY14           |
| RESPONSE            | JET PROPULSION                  | PACIFIC NORTHWEST                   |
| AS16                | LABORATORY58                    | NATIONAL LABORATORY                 |
| ONS                 | JUPITER RESEARCH20              | PEREGRINE SYSTEMS INC 22            |
| 16                  | KACE NETWORKS INC               | POWWARE CORP70                      |
| 43                  | KARTEN ASSOCIATES52             | QUALYS INC                          |
| 20, 29, 35, 41, 57  | KICHLER LIGHTING GROUP 29       | QWEST COMMUNICATIONS                |
| M                   | KROLL ONTRACK INC               | INTERNATIONAL INC                   |
|                     | LAWSON SOFTWARE INC             | RAH SECURITY                        |
|                     | LEAPFROG ENTERPRISES INC1       | CONSULTING LLC                      |
| FICE10              | LENOVO GROUP LTD29.33           | RALLY SOFTWARE                      |
| 1100                | LIBERTY MUTUAL                  | DEVELOPMENT CORP                    |
| INC1                | INSURANCE CO1                   | RAND CORP. 20                       |
| 5 mar               | LOGICACMG PLC                   | RAXCO SOFTWARE INC                  |
| 66                  | MANPOWER INC                    |                                     |
| 70                  | MARRIOTT                        | REMEDY CORP22                       |
|                     |                                 | RIVERSTONE NETWORKS INC14           |
|                     | INTERNATIONAL INC58             | SALESFORCE.COM INC                  |
| 29,35               | MASCO CORP                      | SANA SECURITY INC42.70              |
| ATES                | MCI INC12                       | SAP AG                              |
| CO 8. 8. 12. 14.    | MCKESSON CORP20                 | SAS INSTITUTE INC12                 |
| 20, 29, 29, 45      | MENTAL HEALTH AND MENTAL        | SAWYER REAL ESTATE INC 66           |
| RP7                 | RETARDATION AUTHORITY           | SEAGATE TECHNOLOGY LLC 33           |
| MS CORP 22          | OF HARRIS COUNTY1               | SEBALY SHILLITO &                   |
| LEVISION 42         | MERCURY INTERACTIVE CORP58      | DYER LPA                            |
| NS CORP             | MERRILL LYNCH & CO              | SERVICE EMPLOYEES                   |
| 22, 33, 40, 57, 68  | MICROSOFT CORP 6. 7, 8, 12, 16, | INTERNATIONAL UNION CLC6            |
| 6, 7, 12, 14 29, 35 |                                 | SIEBEL SYSTEMS INC                  |
| 6                   | MISSISSIPPI POWER CO            | SIEMENS AG14                        |
| 6                   | MIT                             | SIEMENS BUSINESS                    |
| 43                  | MOTOROLA INC                    | SERVICES GMBH14                     |
| LONDON 37           | MOZILLA CORP                    | SIMON & SCHUSTER INC                |
| 42                  | MOZILLA FOUNDATION20            | SKYLER TECHNOLOGY INC70             |
| EMS AUDIT           | NASA58                          | SMARTTRUST #8                       |
| OCIATION 1          | NATIONAL INFRASTRUCTURE         | SOFTRICITY INC                      |
| 43                  | ADVISORY COUNCIL                | SONY CORP                           |
| 6                   | NATIONAL SCIENCE                | SOUTHERN CO                         |
| 8                   | FOUNDATION                      | SIPIRE SECURITY LLC 20              |
| 6, 29, 40, 57       | NETWORK APPLIANCE INC. 22       | EPIRENT COMMUNICATIONS INC. 198     |
|                     | I INC. INC. IN AFF LIMITUE DEC  | I INVITATION COMMUNICATIONS INC 198 |

| NEXTPAGE INC            | 46   |
|-------------------------|------|
| NIMCAT NETWORKS INC     |      |
| NORTEL NETWORKS CORP    | . 10 |
| OPENVIEW FORUM          |      |
| INTERNATIONAL           | 8    |
| ORACLE APPLICATIONS     |      |
| USERS GROUP             | 68   |
| ORACLE CORP             | 68   |
| OREGON STATE UNIVERSITY | .14  |
| PACIFIC NORTHWEST       |      |
| NATIONAL LABORATORY     | 37   |
| PEREGRINE SYSTEMS INC   | 22   |
| POWWARE CORP            |      |
| QUALYS INC              | 16   |
| OWEST COMMUNICATIONS    |      |
| INTERNATIONAL INC       | 12   |
| RAH SECURITY            |      |
| CONSULTING LLC          | -1   |
| PALLY SOFTWARE          |      |
| DEVELOPMENT CORP        | 49   |
| RAND CORP.              |      |
| RAXCO SOFTWARE INC      | 0    |
| REMEDY CORP             | 22   |
| RIVERSTONE NETWORKS INC | 14   |
| SALESFORCE.COM INC.     | 10   |
| SANA SECURITY INC42     | 70   |
| SAP AG                  | 60   |
| SAS INSTITUTE INC.      | 40   |
| SAWYER REAL ESTATE INC. | . 12 |
| SEAGATE TECHNOLOGY LLC  |      |
| SEBALY SHILLITO         | 33   |
| DYER LPA                | -    |
| SERVICE EMPLOYEES       | 30   |
| INTERNATIONAL UNION CLC |      |
| BILINEL SYSTEMS INC     | 6    |
| MEMEL SYSTEMS INC       | 68   |
| SIEMENS AG              | . 14 |
| SIEMENS BUSINESS        |      |
| SERVICES GMBH           | . 14 |
| SIMON & SCHUSTER INC    | , 12 |
| SKYLER TECHNOLOGY INC.  | 70   |
| SMARTTRUST #B           |      |
| SOFTRICITY INC.         | 46   |
| SONY CORP12.            | 42   |
| SOUTHERN CO             | 66   |

| SSA GLOBAL                  |      |
|-----------------------------|------|
| TECHNOLOGIES INC            | 49   |
| ST. JOSEPH'S HOSPITAL       |      |
| HEALTH CENTER               | 20   |
| ST. PAUL CO.                | 58   |
| SUMMIT STRATEGIES INC       | 22   |
| SUN MICROSYSTEMS INC 6.     | 52   |
| SYMANTEC CORP               | 20   |
| TACIT NETWORKS INC          | 46   |
| TECHNOLOGY BUSINESS         | -    |
| RESEARCH BUS                | 22   |
| RESEARCH INC                | 10   |
| THE GUARDIAN LIFE INSURANCE | -    |
| COMPANY OF AMERICA          | 7    |
| THE LANDRUM CO              | 6    |
| THE SEDONA GROUP            | 7    |
| THOMAS 8. MONAGHAN INC      | 58   |
| TRIVERSITY INC.             | 14   |
| TULANE UNIVERSITY           | 88   |
| U.K. DEPARTMENT OF WORK     | ~    |
| AND PENSIONS                | 40   |
| U.S. DEPARTMENT OF COMMERCE | 1    |
| U.S. DEPARTMENT OF          |      |
| DEFENSE                     | 40   |
| U.S. DEPARTMENT OF          |      |
| HOMELAND SECURITY           | 24   |
| U.S. FOOD AND DRUG          | -    |
| ADMINISTRATION              | SA.  |
| U.S. SECURITIES AND         | -    |
| EXCHANGE COMMISSION         | 22   |
| U3 LLC                      |      |
| UNISYS CORP                 |      |
| UNITED KEYS INC             | 90   |
| UNIVERSITY OF SHEFFIELD     | 37   |
| UNIVERSITY OF TEXAS         |      |
| AT AUSTIN                   | RIT. |
| UNIVERSUM                   | _    |
| COMMUNICATIONS INC          | 57   |
| VA SOFTWARE CORP            | 52   |
| VERIZON WIRELESS35.         | 43   |
| VIRSA SYSTEMS INC           | 46   |
| W.R. GRACE & CO             | 59   |
| WEBMETHODS INC              | 10   |
| WHOLESECURITY INC           | 6    |
| YAHOO INC                   |      |
| ZURICH FINANCIAL SERVICES   |      |

#### COMPUTERWORLD



### **Need Peer Advice on Reducing IT Complexity?**

Find Proven Strategies at Our Complimentary.\* **Half-day Conference** 

8:30am to 12:30pm • September 29, 2005 • Hyatt Regency Scottsdale • Scottsdale, Arizona



#### **Conquering IT Complexity**

Consolidation and Integration Strategies for Creating Competitive Advantage

- · Services-oriented Architecture
- Web Services
- · Pruning Redundant Software
- · The "Virtual" Enterprise, Virtual Servers and Grid Computing
- · Simplifying Security
- · Incremental Innovation Through Data/Application Integration

To apply for complimentary registration:

- · Visit www.premier100.com/regional
- Or call Chris Leger at 888-299-0155

\*Complimentary registration is limited to qualified IT end user professionals.

#### **Summit Agenda**

8:00am - 8:30am

8:30am - 8:40am

Registration and Networking Breakfast Welcome and Opening Remarks
Julia King, Executive Editor and National
Correspondent, Computerworld

8:40am - 9:15am Numbers Don't Lie: Benchmarking Data Proves That Reducing IT Complexity Cuts Costs Across Other

Business Functions
Allan Frank, President & Chief Technology Officer,
Answerthink, Inc. and Senior Hackett IT Fellow

Project Virtual Gateway: Streamlining Health Services Delivery

in Massachusetts Louis Gutierrez, Chief Technology Strategist, Commonwealth Medicine, University of Massachusetts Medical School

9:45am - 10:15am

Update: State Street's Infrastructure Efficiency Program
Madge Meyer, Executive Vice President, Global

10:15am - 10:45am Networking Break

10:45am - 11:15am

Negotiating Services-Oriented

Contracts
Dan Demeter, Chief Information Officer, and Senior Vice President, Korn/Ferry International

11:15am - 11:45am

Virtual Enterprises and Simplification
Damien Bean Confounder Confounder

11:45am - 12:30pm

and former Chief Information Officer, Hilton

Panel Discussion:
Reducing IT Complexity
Moderator: Don Tennant, Editor in Chief,

Computerworld

Panelists: Damien Bean, Co-founder, CareerCurrency
LLC and former Chief Information Officer, Hilton Hotels;
Dan Demeter, Chief Information Officer, and Serior Vice
President, Korn/Ferry International, Aliasi Frank, President
& Chief Technology Officer, Answerthink, Inc. and Serior
Hacketti TF ellow, Louis Guiterrez, Chief Technology
Strategist, Commonwealth Medicine, University of
Massachusett Medical School, Madge Meyer, EVP,
Infrastructure Services, State Street Corporation

12:30pm - 2:00pm

2:00pm

**Networking Lunch** Program Concludes

Exclusively Sponsored by:

#### Continued from page 1

#### Rita

until it's safe to return.

"The impact of a Category 4 or hurricane is something we're not really familiar with," Langston said. "Even a near miss by a storm of this magnitude will have significant impacts on us."

Allied's contingency plans have long called for making temporary arrangements to relocate its headquarters for one or two weeks, he said. But Katrina showed that much longer-term arrangements should be considered in case a disaster is more serious.

"We think we may be with-

out power in our corporate offices for as long as two weeks" if the brunt of such a storm hits the area, Langston said. The company has around 150 employees at its headquarters, including about 16 IT staffers.

One concern for Allied is that although it uses a data backup service from Cyrus-One Networks LLC, that company is also in Houston. "That is something that in retrospect we are going to look at later," Langston said.

CyrusOne President and CEO Dave Ferdman agreed that "everyone is a lot more sensitive [about major storms] today than before Katrina. We certainly are paying a lot more attention to it."

CyrusOne provides a variety of IT services, including collocation, disaster recovery, hosting, network management and monitoring, to about 130 Houston-area companies.

Ferdman said that all of his IT systems are redundant and that the company replicates its own data to a facility 30 miles away in northern Houston. Asked if he would consider replicating data in an out-of-region facility, Ferdman said, "We feel very confident that the location this is in is sufficiently remote."

Ferdman said his company has brought in four times the normal amount of diesel fuel to keep its backup generators running. CyrusOne also has satellite phones in case local communications networks are disrupted.

#### **Increasing Interest**

Dave Russell, an analyst at Gartner Inc., said there has been a tremendous increase in the number of companies seeking third-party off-site hosting facilities for their data and IT and business systems since Katrina hit last month.

"We've had a lot of inquiries with regard to long-distance replication of data," Russell said. "I think these storms are raising awareness.

"You're talking [about] over half the coast of this country" threatened by recent storms, he said. "People are really looking at disaster recovery from an economic perspective and saying, 'Maybe we can justify spending money on extended replication [of data]."

Shelley Wall, IT operations and network manager for the Mental Health and Mental Retardation Authority of Harris County in Houston, said her IT team worked last week to organize off-site backups and distribute them among personnel to make sure the data is available after the storm.

"We did a lot of relief work for Katrina, and we found the most important part of our communications is our phone system," said Wall. The agency now issues cell phones and has wireless connectivity for laptops. It also issued e-mailenabled BlackBerry devices to most of its staff.

Kevin Roden, CIO at Iron Mountain Inc., a provider of off-site records storage services, said that 29 of its 30 facilities in the Houston area are dedicated to paper records storage. The other stores electronic and magnetic media. All are expected to survive intact, he said. **©** 57047

#### **Gulf Coast Recovering As Rita Looms**

SOME USERS in New Orleans slowly began placing IT systems back online last week, just as the city nervously eyed Hurricane Rita as it made its way through the Gulf of Mexico.

John Lawson, ClO at Tulane
University, the city's largest private employer, said his IT staff
has managed to restart a number of systems since electricity
was restored in the data center
last weet.

The center, located on the 14th floor of a downtown highrise building, wasn't damaged by Katrina but has been closed since the storm struck.

"We feel great" about the restoration of power, said Lawson. "It's very encouraging."

At the same time, Lawson was closely monitoring Rita in case it veered from its projected path. "We will shut down if necessary," he said.

The university managed to keep some key operations going after Katrina hit by moving its core financial and student systems to an outsourcing center in Voorhees, N.J., operated by SunGard Data Systems Inc.

Lawson said he has no immediate plans to return those operations to New Orleans. "At this point, it's just bring up what we can and wait and see how the city recovers."

After riding out Hurricane Katrina in a friend's basement, Lenny Sawyer, CEO of 104year-old Sawyer Real Estate Inc. in Gulfport, Miss., brought his firm's servers and PCs back online last week

The building in which Sawyer Real Estate is located – only 200 feet from the gulf – had been flooded by 6 feet of water during Katrina. The storm's surge waterlogged the firm's 14 critical servers, forcing it to buy new systems.

Sawyer was able to recover customer, property and financial data from its hard drives using data recovery services from Kroll Ontrack Inc. in Eden Prairie. Minn.

"If we'd known how bad [Katrina] was going to be, we would have gotten all the computers and servers out of the office." he said.

As for Rita, Sawyer said he's confident that the storm will just skim the Mississippi coast, bringing only minimum rain and wind

Sawyer said that in the future, he will look into replicating data to a storage provider that's located in an area of the country where hurricanes aren't a

> - Lucas Mearian and Patrick Thibodeau

#### Florida IT Workers Help Mississippi Regain Power

#### Utility employees deliver supplies, satellite phones

#### BY THOMAS HOFFMAN

When Hurricane Ivan tore through the Florida panhandle a year ago, J.T. Young was one of hundreds of residents whose homes were damaged.

So when Hurricane Katrina slammed into the Gulf Coast on Aug. 29, the regional CIO at Gulf Power Co. was quick to lend support to some of the more than 600 workers at sister company Mississippi Power Co. who either lost their homes or suffered significant property damage.

"My home was damaged by Ivan, so I know firsthand what it's like to be in that situation," said Young. He was one of over 500 workers from Pensacola, Fla.-based Gulf Power who traveled to Mississippi to distribute food and other supplies to displaced Mississippi Power workers.

Roughly half of Gulf Power's 46 IT staffers traveled to Mississippi to help restore Gulfport-based Mississippi Power's telecommunications and fiber-optic network.

With virtually all voice communications knocked out in Mississippi by Katrina, Gulf Power sent 65 satellite phones to Mississippi Power to enable the utility to communicate with Atlanta-based Southern Co. — its parent company and with suppliers and business partners that were helping it restore power, said Young.

The phones also allowed Mississippi Power executives to take part in Crispit, or "critical information process in IT," a plan under which business and IT leaders from Mississippi Power and Southern Co. hold conference calls twice daily to coordinate restoration efforts.

"One of the things we do in IT at Gulf Power and at Southern Co. is to begin our [hurricane] preparations fairly early," said Young.

For instance, Gulf Power set up a storm center three days before Katrina reached the mainland and activated the center the day before the storm hit. **© 57053** 

THE ONLY WAY TO DO BUSINESS **OUT OF THE OFFICE IS WITH** MULTIPLE MOBILE DEVICES.

**AVAYA IP TELEPHONY GIVES YOU** FACT #91: SINGLE-DEVICE MOBILITY, LIKE E-MAIL ON YOUR CELL PHONE.



GET YOUR FREE COPY OF "MOBILE WORKFORCE FOR DUMMIES" AT AVAYA.COM/DUMMIES

#### Continued from page 1

#### **Oracle**

It would be foolish not to be concerned about the future. said Jay Schaudies Jr., global vice president of e-commerce at Manpower Inc., a staffing services provider in Milwaukee. Schaudies, a PeopleSoft user who spoke at Open-World, said his company's relationship with Oracle has been good in the 10 months since it acquired the vendor.

#### ANNOUNCEMENTS

#### Oracle's OpenWorld

- \* Application Server 10g Release 3 with updated SOA capabilities
- Certification of WebSphere products with the Oracle stack
- Oracle HTML DB Release 2 now shipping

But Manpower is nevertheless waiting to see if Oracle delivers on its road map and whether the planned \$5.85 billion buy of Siebel Systems Inc. will affect that strategy. "We are going into this with eyes wide open," Schaudies said.

He also said that he wants to make sure the Fusion project. Oracle's plan to build modular, Java-based software that combines the best of its own systems and the acquired technologies, is fully standardsbased. Oracle is looking to avoid the mistakes made by PeopleSoft Inc. after it acquired I.D. Edwards & Co., by constantly communicating with users, executives said.

In that vein, Oracle CEO Larry Ellison said at Open-World that Oracle will focus on building standards-based middleware and applications over the next two years.

Oracle used the OpenWorld stage to unveil what it called hot-pluggable infrastructure software, which will allow its products to be snapped into those of its own partners and rivals such as IBM. Ellison said Oracle will use service-oriented architecture technology in its development of future products, which will allow companies to maintain existing ERP investments, Ellison said.

Ellison also said the company's acquisition strategy looks to gain know-how as much as software. "It's not about trying to preserve code bases," he said. "It's about trying to preserve experience."

Despite Ellison's openness about Oracle's strategy, "all vendors remain on probation at all times," said John Matelski, deputy CIO of the city of Orlando, which is a PeopleSoft

#### Ellison Talks About the State of Oracle

In a keynote held during Oracle's OpenWorld conference here last week. Oracle founder and CEO Larry Ellison took to the soapbox to give his views on a number of subjects

On Oracle's middleware stack and industry standards: We're basing our middleware on Java and Java-related Internet standards. Of course. our applications are built on top of Fusion middleware. As long as we build on standards, you should be able to un-

ELLISON says

the "next big

thing" will be based entirely

on Java and

industry

standard

plug our container and plug in IBM WebSphere if it runs faster. This lets you preserve your investment in existing applications and make choices in the future. We surprised a lot of people when we announced we intended to certify

our Fusion applications suite with IBM WebSphere components.

On Oracle's security capabilities: Our database now lets you

encrypt in the database. We encrypt the data as it comes off disk drives. One of the big debates in Oracle today is [whether] we should allow customers to do backups that aren't encrypted. If you use Oracle backup and you lost a tape or DVD, that data is encrypted.

On the growing scale of Oracle during its acquisition spree: Our re-

search and development budget is over \$2 billion. We're able to invest more in CRM and business intelligence and in human resources management systems. We're able to invest more in industry functionality. Scale is extremely important in software.

On Oracle's plans for Siebel's OnDemand hosted CRM service: The suggestion we'd kill Siebel OnDemand is very peculiar. We said by buying Siebel we'd increase our presence in OnDemand

On the "next big thing": The Internet is the last architecture. I'm not sure what comes after service-oriented architecture There are a lot fascinating new technologies. In terms of assembly. I'm not sure what the successor architecture will be. As we build our next generation, it won't be on PeopleSoft tools or Siehel tools or Oracle forms or reports. It's not written on any proprietary technology. It's entirely in Java and industry-standard technologies. We'll continue to support PeopleSoft tools for the next decade or two.

- Marc L. Songini

Phil Walton, group director of IT at Spirent Communications Inc., said he's encouraged by Oracle's moves so far, especially its decision to offer links to third-party tools like IBM's WebSphere middleware. © 57050

shop. "Technology and business processes evolve so rapidly that we need to be flexible and adaptable. If a vendor is unable to be just that, they run the risk of being replaced."

PeopleSoft user Green Mountain Coffee Roasters Inc. is keeping a close eve on Fusion to ensure that it will support its custom code, said Rod Ely, the company's application development manager and systems architect. Some custom applications are important to competitive success, Ely said.

#### **Oracle Revamps Support Plan**

**ORACLE LAST WEEK over**hauled its support policy as part of an effort to reassure users that they won't be forced to migrate from their existing applications.

At the Oracle OpenWorld user conference here last week, executives outlined a policy that will, to varying degrees, ensure that users have access to the new lifetime support programs.

At the same time. Oracle said customers can migrate at their own pace to the best-of-breed

set of applications, known as Fusion, that are expected to come out in 2008

Oracle executives said that they hope the support program will help convince the customers of the companies it has acquired - including PeopleSoft and J.D. Edwards - not to bolt to rivals like SAP AG, which have been playing on user fears of product obsolescence.

Jay Schaudies Jr., global vice president of e-commerce at staffing services provider Manpower, which uses PeopleSoft ERP software, said the plan sounds good but he is waiting to study its cost and how it will be implemented. "I don't have enough details," he said.

Juergen Rottler, executive vice president of Oracle On Demand and support services, said the new program offers two types of support, premier and sustaining. The premier offering provides support for the Oracle database, middleware and applications in stages, the first being for five years after the general release

In the sixth year, Rottler said,

customers can buy the same level of extended support for 10% more than regular maintenance costs: for the next two years. they pay a 20% premium. After that, the fee drops back to its original level. The sustaining level of support offers access to Oracle's MetaLink technical assistance offering as well as to preexisting fixes. Other updates must be purchased for additional fees.

Oracle also said it is extending the EnterpriseOne XE premier support through 2013. It originally planned to halt support in 2007 [QuickLink 52089].

The latter move was welcomed by at least one user group. "One of the ongoing fears of users is desupport," said Pat Dues, president of the independent Oracle Applications Users Group (OAUG), Customers have been worried that Oracle plans to replace their applications with the Fusion software. Dues said.

She added that users still need more information about some issues, such as how the program will affect support costs and the cost of maintaining applications on older hardware.

- Marc L. Songini

Incidial postage paid at Framingham, Mass., and other mailing offices. Posted under Canadain International Publication agreement #40063800. CANADIAN POSTMASTER. Please return undeliverable copy to PO Box 1932, Window, Ontario N9A 7C9, Computerworld (ISSN 0010-4841), which except a single combined issue for the last two weeks in December by Computerworld Inc., I Speen Street, 80x 917. Framingham, Mass. 0170-1971. Copyright ROMA by Computerworld Inc., All rights researed. Computerworld and its purchased on microlifies inc., 900 Art., 1940. Please Alex Anna Antonious principation and the Computerworld Inc., All rights researed to present as its guardesid on microlifies inc., 900 Art., 1940. Please Alex Roman Antonious Proposition Inc., 194



ALAN H. "BUD" SELIG COMMISSIONER OF MAJOR LEAGUE BASEBALL"

SAS gives MLB.com

# THE POWER TO KNOW

how to give fans the ultimate baseball experience.

Millions of fans. Thirty teams. One passion, And 24/7 access to it all through MLB.com. As the official site of Major League Baseball, MLB.com is the inchest, deepest source of original baseball news and highlights on the Internet. SAS is proud to provide the state-of-the-art business intelligence and analytics software that is helping. Major League Baseball enrich the interactive experience for the humoreus of millions of visitors who make MLB com such a big hit. To learn more about MLB com and other SAS success stones that go Beyond Bt. visit our Web site.

www.sas.com/mlb

sas

FRANK HAYES • FRANKLY SPEAKING

## Eye of the Beholder

SAW SOME VERY GOOD IDEAS, and a few great ones, at DemoFall last week. (You know the Demo gimmick: Each vendor gets just six minutes to pitch its new product.) A company called U3 lets you run your entire PC desktop directly from a USB thumb drive. IntelliReach has an appliance that keeps your e-mail system from ever going down, while Barracuda has a dandy instant-messaging firewall appliance. Sana Security and Determina have come up with new ways to block malware. And those are just some of the ones with IT-shop appeal (go to QuickLink a7160 for my quick takes on all 65 exhibitors).

And, as usual, I saw some bad ideas, too.

Like the one from Powware, which has a code-free application development system you use by drawing diagrams on a screen by hand—it guides you through with audio prompts. Yeah, that's what professional programmers need. Or ActiveWord Systems, whose shorthand system for using tablet PCs is apparently for people who thought writing on a screen by hand wasn't kludgy enough.

A company called Skyler Technology believes its proprietary database technology (based somehow on using prime numbers to create indexes) can take over the world of huge, high-performance databases. H3.com has what may be best described as a system for kickback-based employee referral by virtual strangers; somehow they got their idea from the fact that the best would-be employees are recommended by current employees.

And United Keys offers a keyboard with little LCD displays on the function-key caps — and they can change at a moment's notice, so you have to keep staring at the keyboard or you'll never be sure what any function key will do.

Are these truly bad ideas? They sure sound like it to me. But I'm glad they'll be on the market.

Why? Partly because it means investors are once again willing to make low-percentage bets on loopy IT product ideas. That's a sign that investment money is loosening up—and business is picking up. When bad ideas can get funded, it's good news for good ideas, too.

But I'm also glad because I know the market is smarter than I am. Yes, these ideas sound hopeless to me. Among all the smart, elegant products trotted out at DemoFall for IT departments, consumers, retailers, real estate agents, bloggers, eBay shoppers and photo fanatics, these just seem clueless.

Truth is, though, the ground is littered with smart, elegant products. The market — actual customers making actual buying decisions — doesn't always agree with smart, elegant theory. So good ideas don't always fail. Or, more accurately, what look like good ideas to pundits, deep thinkers and smart, elegant people may not look quite the same to real users.

And no matter how clueless, useless or hopeless something appears at first glance, real users may decide it's what they want. And that makes it a good idea.

Keep that in mind next time someone on your IT staff brings a bad idea to you.

Sure, you could explain at length why it's wrongheaded. And you should explain if it poses a genuine threat to security, reliability or availability. But if it's just dumb, not dangerous, maybe you should have that staffer try building

a business case — starting with some discussions with users about what they want.

Chances are, that bad idea will evaporate once users give it the gimlet eye. Most bad ideas do. And your bad-idea staffer will come away with a better notion of what users want.

And if that bad idea doesn't look so bad to users? If they like it and their managers back it, and executives fund it? Then you've helped find a good idea after all.



world's senior news columnist, has covered IT for more than 20 years. Contact him a track hame to be senior news to the contact him a

#### **Just Doing the Best We Can**

Trouble ticket: "When my computer is turned on, the person sitting behind me gets shocked. My computer makes a buzzing noise, then she yells. Also seems to be a disconnect between computer and any printer. Please help." Support pilot fish can't find the problem with the PC, but he does get an additional request from the user at the next desk back: "If you can't fix it, can you at least make it shock somebody else?"

Picky, Picky! At the government agency where this pilot

ment agency where this pilot fish works, users may have access to as many as 78 different servers. "When their passwords expire on any one of them, they're required to submit a password-reset request through an on-line system," says fish. "One of our users decided that resetting her password was not good enough. In the 'special instructions' part of the online form, she typed," I need a new password, not just a reset!"

That's One Way Of Putting It Pilot fish gets a request from a user." My monitor did not pass the drop test during our department move. I would like to get another one."

Well, Yes, But . . . At a large resort for a conference, this pilot fish can't use hie VPN to connect to his company. Could a firewall be blocking my connection? he asks someone on the resort's sales staff. "Oh yes, we have a large firewall," she says. Would it be possible for me to see it? fish asks, hoping at least to see what model it is. "She took me to a

large, dark closet," fish reports, "turned on the light and pointed to a

floor-to-ceiling cinderblock wall that separates the meeting rooms from the guest rooms."

Insider, Really!
User: "Hi, I'm trying to access our company intranet from home. Why can't I get to my division's home page?"
Fish: Are you dialing directly into our network?
User: "I'm using my America Online account." Fish: That explains it - our intranet prevents outsiders from getting in. Panic-stricken user: "I'm not an outsider - I've worked here for five years!"

Maybe Too Hard It doesn't take long for this pilot fish to diagnose the problem with a color printer: It's a bad color ink cartridge – a really bad one. "The user told me that someone else had just changed it," fish says. "She asked how I knew it was bad. The antire circuit plate was gone from the cartridge. When I showed her, she told me the person who changed the cartridge had worked long and hard to remove the tape from the cartridge."

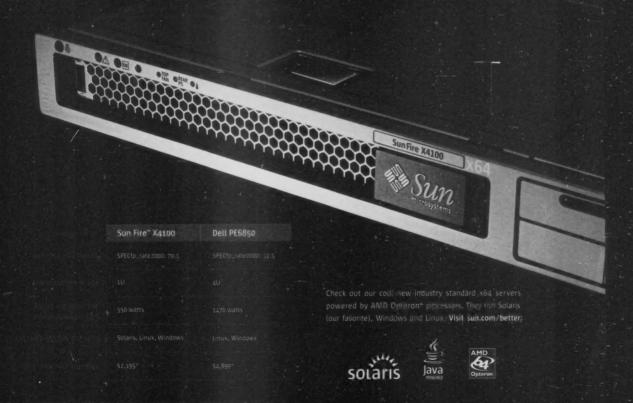
DON'T WORK SO HARD AT IT. Just send me your true tale of IT life at sharky@computerworkd.com. You'll get a stylish Shark shirt if I use it. And check out the daily feed, browse the Sharkives and sign up for Shark Tank home delivery at computerworld.com/sharky.



Given how hot and slow our competitor's servers are, it's no surprise their name

# RHYMES WITH HELL.

THE NEW INDUSTRY STANDARD x64 SERVERS FROM SUN.



#### NETWORK

The largest and fastest national wireless data network. The largest U.S. provider on the global standard.

#### EXPERTISE

Our people and partners make wireless work for more businesses than any other wireless carrier.



#### APPLICATIONS

The broadest and deepest portfolio of wireless business solutions.

#### SERVICE

24/7 enterprise-grade support. And a service staff dedicated solely to business people.

# real time gets Corporate Express there in no time.

With its 24/7 dedicated business service team, Cingular gave Corporate Express the support, training, and technology needed to migrate from a paper-based delivery system to a real-time wireless solution. From system installation and operation to employee training, the Cingular service team ensured a seamless



transition to the ALLOVER™ network, the largest digital voice and data network in America. For the leader in office supplies, Cingular increased driver productivity while reducing administrative costs.

#### CINGULAR MAKES BUSINESS RUN BETTER

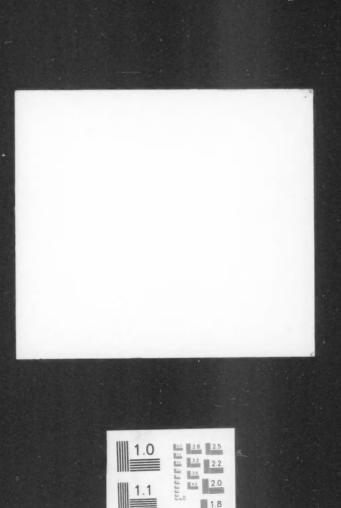


Find out how Cingular can make your business run better:

CALL your account representative -or- CLICK cingular.com/businessleader

Cingular's ALLOVER data network covers over 250 million people and is growing.

Coverage is not available in all areas. Global coverage based on coverage in 174 countries. Fastest claim compares Cingular's measured speed of its EDGE network to other carriers' speed claims for their national data networks. All marks property of their respective owners. ©2005 Cingular Wireless. All rights reserved



1.8

1.25